YAMAHA

Advanced Operating Manual

Manuel d'utilisation avancé / Referenzhandbuch

disklavier™

GENERAL
midi **XG**

PRO / Mark IV Series

IMPORTANT NOTICE
FOR THE UNITED KINGDOM

Connecting the Plug and Cord

IMPORTANT: The wires in mains lead are coloured in accordance with the following code:

GREEN-AND-YELLOW : EARTH
BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN and YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol or coloured GREEN and YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK .

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Alleen voor klanten in Nederland
Bij dit produkt zijn batterijen geleverd.
Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.
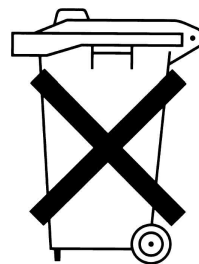
The Control Unit is classified as a Class 1 laser product. One of the labels below or similar is located on the inside of the CD drive unit.

CLASS 1 LASER PRODUCT
LASER KLASSE 1
LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT
APAREIL A LASER DE CLASSE 1
EN60825

CLASS 1 LASER PRODUCT
LASER KLASSE 1

Laser Diode Properties
* Material: GaAlAs
* Wavelength: 790/795 nm
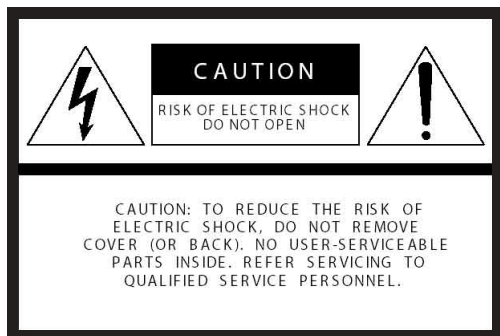* Laser Output Power at the lens of the Laser Pick Up Unit: max. 5mW

CAUTION—Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION—L'utilisation de commandes ou de r glages, ou l'exécution de procédures, autres que celles qui sont spécifiées ici peuvent conduire une exposition des rayonnements dangereux.

VORSICHT—Die Verwendung von Bedienungselementen oder Einstellungen, oder die Anwendung von Verfahren, die nicht in dieser Anleitung angegeben sind, kann zu gefährlicher Freisetzung von Strahlung fü hren.

SPECIAL MESSAGE SECTION

PRODUCT SAFETY MARKINGS: Yamaha electronic products may have either labels similar to the graphics shown below or molded/stamped facsimiles of these graphics on the enclosure. The explanation of these graphics appears on this page. Please observe all cautions indicated on this page and those indicated on the safety instruction section.

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┌─────────────────────────────────────────┐
│  ┌───┐  ┌─────────────────┐  ┌───┐       │
│  │ ⚡ │  │   C A U T I O N │  │ ! │       │
│  └───┘  │ RISK OF ELECTRIC SHOCK │ └───┘  │
│         │    DO NOT OPEN   │              │
│         └─────────────────┘              │
│  ┌─────────────────────────────────────┐ │
│  │ CAUTION: TO REDUCE THE RISK OF      │ │
│  │ ELECTRIC SHOCK, DO NOT REMOVE       │ │
│  │ COVER (OR BACK). NO USER-SERVICEABLE│ │
│  │ PARTS INSIDE. REFER SERVICING TO    │ │
│  │ QUALIFIED SERVICE PERSONNEL.        │ │
│  └─────────────────────────────────────┘ │
└─────────────────────────────────────────┘
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SEE BOTTOM OF ENCLOSURE OR LOWER FRONT PANEL FOR GRAPHIC SYMBOL MARKINGS

The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

IMPORTANT NOTICE : All Yamaha electronic products are tested and approved by an independent safety testing laboratory in order that you may be sure that when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. DO NOT modify this unit or commission others to do so unless specifically authorized by Yamaha. Product performance and/or safety standards may be diminished. Claims filed under the expressed warranty may be denied if the unit is/has been modified. Implied warranties may also be affected.

SPECIFICATIONS SUBJECT TO CHANGE : The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

ENVIRONMENTAL ISSUES: Yamaha strives to produce products that are both user safe and environmentally friendly. We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

Battery Notice: This product MAY contain a small nonrechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

Warning: Do not attempt to recharge, disassemble, or incinerate this type of battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by applicable laws. Note: In some areas, the servicer is required by law to return the defective parts. However, you do have the option of having the servicer dispose of these parts for you.

Disposal Notice: Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc.

NOTICE : Service charges incurred due to lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacturer's warranty, and are therefore the owners responsibility. Please study this manual carefully and consult your dealer before requesting service.

NAME PLATE LOCATION: The graphic below indicates the location of the name plate. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial number, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.
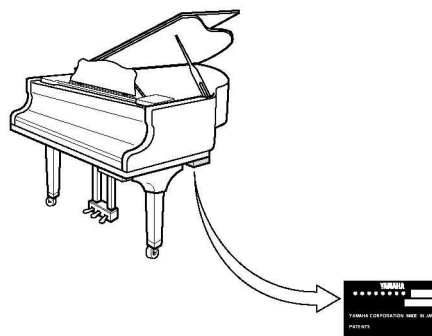
Model _____

Serial No. _____

Purchase Date _____

IMPORTANT SAFETY INSTRUCTIONS

WARNING — When using any electrical or electronic product, basic precautions should always be followed. These precautions include, but are not limited to, the following:

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15) This product shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

16) Do not place this product or any other objects on the power cord or place it in a position where anyone could walk on, trip over, or roll anything over power or connecting cords of any kind. The use of an extension cord is not recommended! If you must use an extension cord, the minimum wire size for a 25' cord (or less) is 18 AWG. NOTE : The smaller the AWG number, the larger the current handling capacity. For longer extension cords, consult a local electrician.
17) WARNING - To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
18) Care should taken that objects do not fall and liquids are not spilled into the enclosure through any openings that may exist.
19) This product, either alone or in combination with an amplifier and headphones or speaker/s, may be capable of producing sound levels that could cause permanent hearing loss. DO NOT operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist. IMPORTANT : The louder the sound, the shorter the time period before damage occurs.
20) Some Yamaha products may have benches and/or accessory mounting fixtures that are either supplied as a part or the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that benches are stable and any optional fixtures (where applicable) are well secured BEFORE using. Benches supplied by Yamaha are designed for seating only. No other uses are recommended.
21) Do not modify internal AC connection for the I/O Center "DIO-100".
22) This product shall be connected to a MAINS socket outlet with a protective earthing connection.
23) This product has a power switch for shutting off all system. The switch is located on the Power Supply Unit nearby the entrance of the AC cord. Note that the switch on the I /O Center does not shutdown all system but I /O Center and Media Center only. Pressing the [I] side of the switch turns the I/O Center on and the [O] side off.
24) Make sure that the plug of the I/O Center's power cable can easily be disconnected from the AC outlet as a measure of precaution.

Battery
– Use your Pocket Controller "PRC-100" only with "EA-BL08" batteries, the "EA-70" AC adapter.
– Danger of explosion if battery incorrectly replaced. Replace only with the same type.

Outlets for Speakers
– Connect speakers of 2A or less of totals. Do not connect other products except speakers.
– Consult Yamaha service technician when using the outlets outside the purchased area.

PLEASE KEEP THIS MANUAL

STATEMENTS REGARDING THE WIRELESS LAN CARD

RADIATION EXPOSURE STATEMENT

The available scientific evidence does not show that any health problems are associated with using low power wireless devices. There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. The WD05740 has been tested and found to comply with the Federal Communications Commission (FCC) guidelines on radio frequency energy (RF) exposures. The maximum SAR levels tested for the WD05740 has been shown to be 0.563W/kg at body.

This device should not be co-located or operated with any other antenna or transmitter.

In addition, use of the equipment other than PDA may not ensure compliance with FCC RF exposure guidlines.

FCC AND INDUSTRY CANADA INFORMATION (U.S.A , CANADA)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions :
(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Properly shielded an grounded cables and connectors must be used for connection to host computer and/or peripherals in order to meet FCC emission limits.

L'utilisation de ce dispositif est autorisee seulement aux conditions suivantes : (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit etre pret a accepter tout brouillage radioelectrique recu, meme si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website www.hc-sc.gc.ca/rpb

« L'installateur du présent matériel radio doit s'assurer quel'antenne est située ou pointée demanière à ce que cette dernière n'émette pas de champs radioélectriques supérieurs aux limitess pécifiées par Santé Canada pour le grand public; consulterl e Code de sécurité 6, disponible sur le site Web de Santé Canada, à l'adresse suivante : www.hc-sc.gc.ca/rpb. »

CE① Hereby, Yamaha, declares that this Wireless LAN Card, model WD05740 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
In some regions, there are restrictions in the outdoor use of the Wireless LAN Card.

Yamaha vakuuttaa täten että langaton LAN-kortti, malli WD05740 tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Bij deze verklaart Yamaha dat deze Wireless LAN-kaart, model WD05740 voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.

Par la présente, Yamaha déclare que cette carte réseau sans fil, modèle WD05740 est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables.

Härmed intygar Yamaha att denna trådlösa LAN-kort, modell WD05740 står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Undertegnede: Yamaha erklærer herved, at følgende udstyr: Trådløst netværkskort, model WD05740 overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

Hiermit erklärt Yamaha, dass sich diese drahtlose LAN-Karte, Modell-WD05740 in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet.

Με την παρούσα, η Yamaha, δηλώνει ότι η ασύρματη κάρτα LAN, μοντέλο WD05740 συμμορφώνεται με τις απαραίτητες απαιτήσεις και τις λοιπές σχετικές διατάξεις της οδηγίας 1999/5/ΕΚ.

Con la presente Yamaha dichiara che questa sche da LAN senza filo, modello WD05740 è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Por medio de la presente Yamaha declara que la tarjeta de red inalámbrica, el modelo WD05740, cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

Yamaha declara que este cartão Wireless LAN, modelo WD05740 está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

In some cases Wireless LAN card type WL1100C-CF may be used in place of Wireless LAN card type WD05740. All statements on this page also apply to the WL1100C-CF.

disklavier™

PRO / Mark IV Series

Advanced Operating Manual

Introduction

Congratulations and thank you for purchasing the Disklavier PRO/Mark IV Series Piano.
The Disklavier PRO/Mark IV Series Piano is an exciting new type of grand piano that brings together the excellence of Yamaha's finest acoustic piano and state-of-the-art innovations into an expansive home entertainment station. The new pocket controller offers greater ease of use to allow players of any level to enjoy the exciting functions of the piano from basic keyboard playing to PianoSoft playback entertainment. Let your imagination go, and enjoy the Disklavier to your heart's content.
Here are some examples of how you can enjoy your Disklavier

- Play the acoustic piano or the digital piano
- Play back songs accompanied by live piano performance
- Create a library of favorite songs in the Disklavier
- Practice playing songs using Disklavier's innovative functions
- Play along with professional recordings
- Connect the Disklavier with a computer to compose ensemble songs
- Synchronize piano performance with a video recording

Before using your Disklavier, please read this manual thoroughly and keep it on hand for future reference.

Note on source code distribution

For three years after the factory shipment, you may request from Yamaha the source code for any portions of the product which are licensed under the GNU General Public License by writing to the following address:
1480 Ryoke, Kakegawa, Shizuoka, 436-0038, JAPAN
Piano International Sales Division, YAMAHA Corporation
The source code will be provided at no charge; however, we may require you to reimburse Yamaha for the cost of delivering the source code to you.
The source code download is also available on the following website;
http://www.global.yamaha.com/download/disklavier_markiv/

- Note that we shall bear no responsibility whatsoever for any damage arising from changes (additions/deletions) made to the software for this product by a third party other than Yamaha (or party authorized by Yamaha).
- Note that re-use of source code released to the public domain by Yamaha is unguaranteed, and Yamaha shall not bear any responsibility whatsoever for the source code.

Note on the online document

Additional license information is included in the HDD in the Disklavier system. Connect the LAN port on the I/O Center to your network router, and then open the respective documents in the [Document] folder in the Disklavier's HDD.

Trademarks & Copyrights

- This product is manufactured under license of U.S. Patents No. 5231671, No. 5301259, No. 5428708, and No. 5567901 from IVL Technologies Ltd.
- Yamaha, Disklavier, Silent, PianoSoft, PianoSoft·Plus, PianoSoft·PlusAudio, PianoSmart, and Smart PianoSoft are trademarks of Yamaha Corporation.
- SmartKey, CueTIME, and You Are The Artist are trademarks of Yamaha Corporation or Yamaha Corporation of America.
- Disklavier MarkIV software, Copyright © 2004 YAMAHA CORPORATION.
- This contains programs licensed under the GNU General Public License, GNU Lesser General Public License, the BSD Copyright, the Artistic License, and the others.

Important Precautions

Read the following before operating the Disklavier.

Warning

- Do not locate the Disklavier in a place subject to excessive heat, low temperatures, or direct sunlight. This could be a fire hazard and may damage the finish and internal parts.
- Excessive humidity or dust can lead to fire or electric shock.
- Connect the plug on the Disklavier power cable to a compatible AC outlet. Failure to do so will present a fire and electric shock hazard. If the power cable plug is not compatible with your AC outlet, consult your dealer.
- Do not plug several devices into the same AC outlet. This can overload the AC outlet, and lead to fire and electric shock hazard. It may also affect the performance of some devices.
- Do not place heavy objects on the power cable. A damaged power cable is a potential fire and electric shock hazard. If the power cable runs under a carpet, make sure heavy objects, including the Disklavier, are not placed on top of the cable.
- If the power cable is damaged (i.e. cut or a bare wire is exposed), ask your dealer for a replacement. Using the Disklavier in this condition is a fire and shock hazard.
- When disconnecting the power cable from an AC outlet, always pull by the plug. Never pull the cable. Damaging the cable in this way is a potential fire and electric shock hazard.

- The cover of the unit should be removed only by qualified service technicians.
- Do not place liquid containers such as vases, potted plants, glasses, cosmetic bottles, medicines, etc., on top of the Disklavier.
- Do not try to modify the Disklavier, as this could lead to fire or electric shock hazard.
- When moving the Disklavier to another location, turn off the power, remove the power plug from the AC outlet, and remove all cables connected to external devices.

Cautions

- Turn off all audio devices when connecting to the Disklavier. Refer to the user's guide for each device. Use the correct cables and connect as specified.
- Set the volume level on all the devices to minimum before applying power.
- Do not play the Disklavier at a high volume for extended periods; you may damage your hearing. This is especially important when using headphones. If you think your hearing ability is impaired, consult your doctor.
- If the Disklavier is worked extremely hard — that is, prolonged playback of very "busy" songs — the Disklavier's thermal relay may trip. The thermal relay will automatically reset when the Disklavier has cooled down.
- If you notice any abnormality — such as smoke, odor, or noise — turn off the Disklavier immediately, and remove the power plug from the AC outlet. Consult your dealer for repair.

- If a foreign object or water gets inside the Disklavier turn it off immediately, and remove the power plug from the AC outlet. Consult your dealer.

- If you plan not to use the Disklavier for a long period of time (such as when you are on vacation), disconnect the electrical mains.

- Always remove the power plug from the AC outlet before cleaning the Disklavier. Leaving the power plug connected presents a risk of electric shock.

- Do not use benzene, thinner, cleaning detergent, or a chemical cloth to clean the Disklavier.

- Do not place metal objects with rubber feet on top of the Disklavier. The color and finish of the Disklavier can be damaged.

- Do not place heavy objects on the Disklavier. Doing so can damage the Disklavier.

- Use a soft, dry cloth to clean the Disklavier. However, if you discover a stain, carefully use a soft damp cloth to remove it.

Interference

- The Disklavier uses high-frequency digital circuits that may cause interference to radios and TVs placed close to it. If interference does occur, relocate the affected equipment.

Handling Rechargeable Battery

- Only use the "EA-BL08" rechargeable battery.

- When charging, be sure to use the Pocket Controller only with the "EA-70" AC adaptor.

- Do not dispose of the battery in a fire.

- Also keep the battery away from open flames.

- Never attempt to disassemble the battery pack.

- Do not short-circuit the terminals as they will become very hot and will damage the battery.

- Do not drop or subject the battery to shock.

- After storing the battery for a long period of time, be sure to charge the battery completely prior to use.

- Charge the battery properly, according to the details described in this manual.

- Fluid from a leaking battery accidentally entering an eye could result in serious injury. Should this occur, wash with clean water and immediately consult a doctor.

- Should fluid from a leaking battery come into contact with your skin or clothes, immediately wash with clean water.

Please keep this manual for future reference.

Table of Contents

English

Getting Started

Items Supplied with the Disklavier

Make sure the following items are supplied with your Disklavier:

- Media Center (1)
- Installation kit for the Media Center (1 set)
- Monitor speaker (2)*
- Installation kit for the monitor speaker (1 set)*
- Speaker cord (2)*
- Pocket Controller PRC-100 (1)
- CF wireless LAN card (2)**

- Rechargeable battery EA-BL08 (1)
- Cradle (1)
- AC adaptor EA-70 (1)
- AC power cord (1)
- Advanced Operating manual (this book) (1)
- Quick Guide (1)
- Stereo headphones (1 set)

* Supplied only with the Mark IV Series.
**One of two cards is attached to the I/O Center at the factory.

Names of Parts and Their Functions

Media Center

— Front —
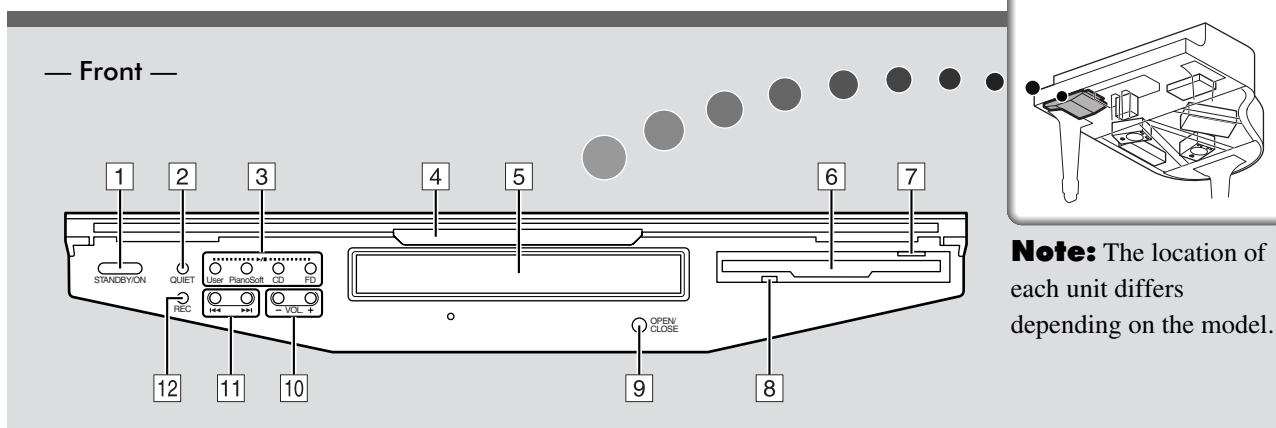
Note: The location of each unit differs depending on the model.

1 **STANDBY/ON button**
Pressing the button turns the Disklavier on or puts it in Standby mode.
Holding down the button shuts down the Disklavier.

2 **QUIET button**
Activates the Quiet Mode.

3 **Source Select buttons**
Starts or stops playback of the songs stored in the corresponding library/medium.

User: Selects the User Library.
PianoSoft: Selects the PianoSoft Library.
CD: Selects the loaded CD.
FD: Selects the loaded floppy disk.

4 **Front lid**
Draw and swing down to cover the front panel.

5 **CD tray**
→ pg. 20 "Loading a CD"

6 **Floppy disk drive**
→ pg. 20 "Loading and Ejecting a Floppy Disk"

⑦ **Eject button**

Ejects the loaded floppy disk.

⑧ **Access lamp**

Lights while the system is reading/writing data on the floppy disk.

⑨ **OPEN/CLOSE button**

Opens and closes the CD tray.

⑩ **VOL –/+ (volume) buttons**

Adjusts the overall volume.

⑪ **◄◄/►►I (Song Select, Fast Reverse/Fast Forward) buttons**

Pressing the button selects a song.

Holding down the button fast reverses/forwards.

⑫ **REC button**

Set the Disklavier in Record Standby mode.

— Bottom —
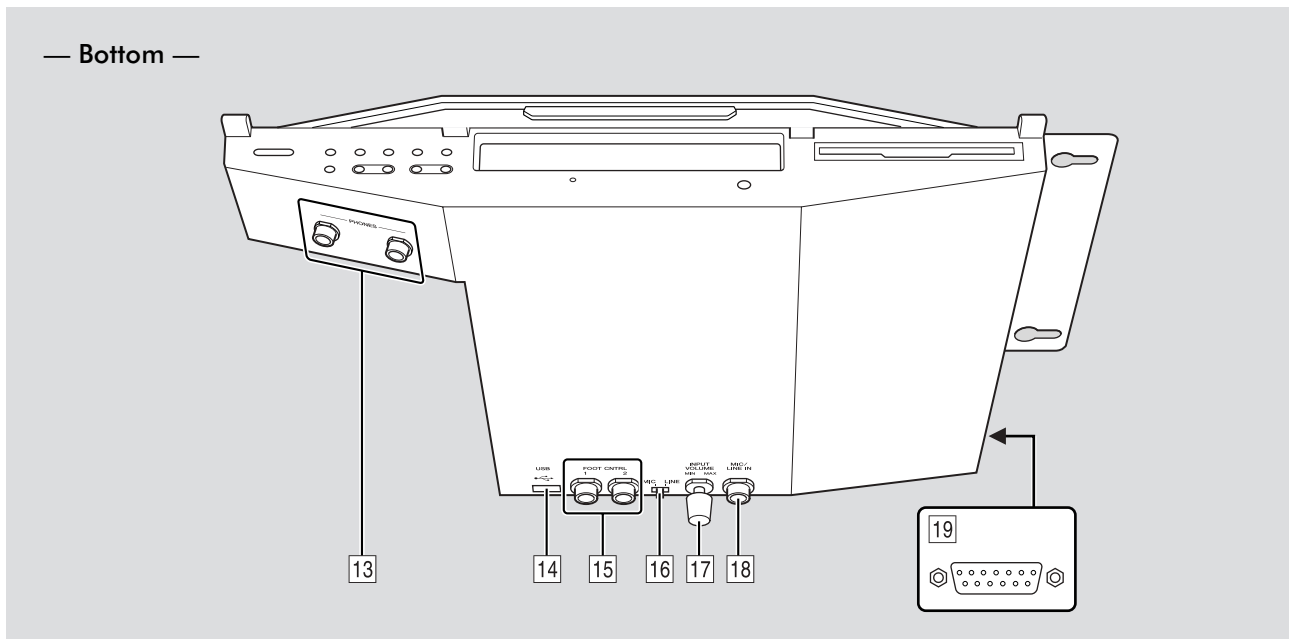
⑬ **PHONES jacks**

Accept headphones.

⑭ **USB ●←←→ (type A) port**

Accepts a USB flash memory, etc.

Note: Certain USB storage devices may not function properly with the Disklavier PRO/Mark IV Series. For a list of compatible products, please visit www.yamaha.com/disklavier.

⑮ **FOOT CNTRL1/2 jacks**

Accepts foot controls/switches. (→ pg. 59)

⑯ **MIC/LINE switch**

Switches the input sensitivity of the MIC/LINE IN jack.

MIC: Select this when you connect a microphone to the MIC/LINE IN jack.

LINE: Select this when you connect an external audio equipment to the MIC/LINE IN jack.

⑰ **INPUT VOLUME knob**

Adjusts the input volume.

⑱ **MIC/LINE IN jack**

Accepts a microphone.

⑲ **To I/O Center port**

Accepts the cable from the I/O Center.
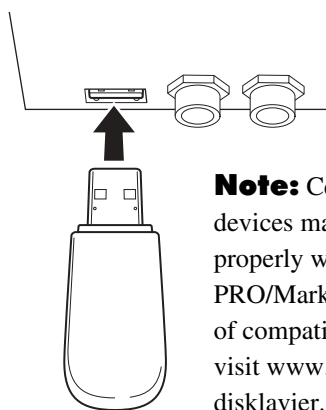
Note: Although the chassis of the Media Center may become hot when you use the Disklavier for a long period of time, this is not a malfunction.

I/O Center

— Front —

Note: The location of each unit differs depending on the model.

① **OUTPUT jacks**

L/(L+R): Accepts speaker cord from the left Monitor speaker*.

R: Accepts speaker cord from the right Monitor speaker*.

② **TO MEDIA CENTER port**

Accepts the cable from the Media Center.

③ **OMNI IN (L/R) Multi-purpose input jacks**

Accept the RCA cords from the audio output of an external CD player, etc.

④ **SYNC IN (L/R) input jacks**

Accept the RCA cords from the audio output of a camcorder.

⑤ **USB ⬄ (type B) port**

Accept the USB cable from a computer.

⑥ **MIDI (IN/OUT) terminals**

Accept the MIDI cable from the input/output of a MIDI device.

* Supplied only with the Mark IV Series.

⑦ **SYNC OUT (L/R) jacks**

Accept the RCA cords from the microphone/line input of a camcorder.

⑧ **Dip switches**

For service use.

⑨ **LED indicators**

For service use.

⑩ **SYSTEM INSTALL button**

For service use.

⑪ **RESET button**

For service use.

⑫ **OMNI OUT (L/R) Multi-purpose output jacks**

Accept the RCA cords from the audio input of an AV amplifier.

— Left side —

13 **AC inlet**

Accepts the power cable from the Power Supply unit.

14 **MAINS switch**

Turns the I/O Center on/off.

— Right side —
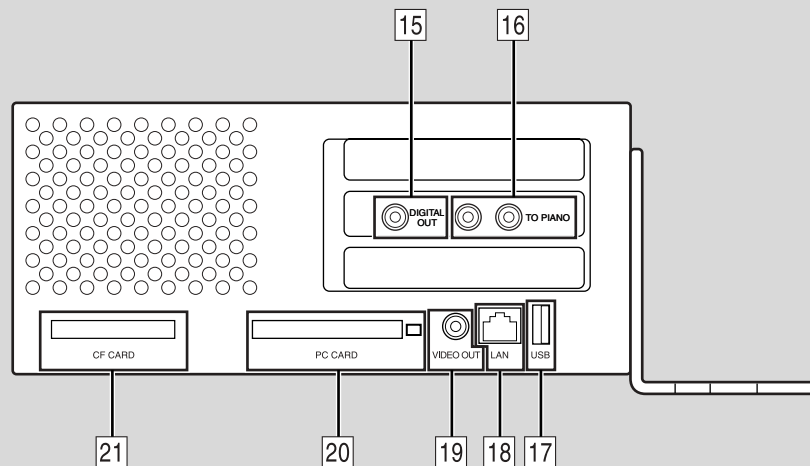
15 **DIGITAL OUT jack**

Accepts the coaxial cable from the digital audio input of an AV amplifier or mixer, etc.

16 **TO PIANO jacks**

Accept the cords from the Central Signal Processor.

17 **USB (Type A) port**

For future use.

18 **LAN (RJ 45) port**

Accepts the LAN cable from a personal computer.

19 **VIDEO OUT jack**

Accepts the video cable from composite video input of a TV.

20 **PC CARD (PCMCIA type II) slot**

For future use.

21 **CF CARD (PCI) slot**

The supplied CF wireless LAN card is attached to this slot at the factory.

Central Signal Processor

— Front —

Note: The location of each unit differs depending on the model.
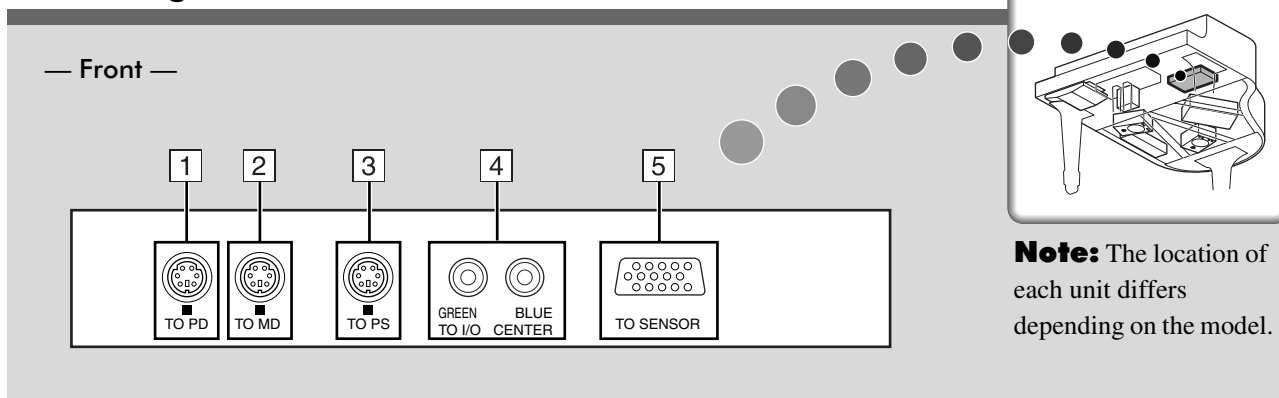
① **TO PD terminal**

Accepts the power cord from the Pedal Drive (PD) unit.

② **TO MD terminal**

Accepts the power cord from the Motor Drive (MD) unit.

③ **TO PS terminal**

Accepts the power cord from the Power Supply (PS) unit.

④ **TO I/O CENTER (GREEN/BLUE) jacks**

Accept the cords from the I/O Center.

⑤ **TO SENSOR port**

Accepts the cable from the Disklavier.

Power Supply Unit

— Front —

Note: The location of each unit differs depending on the model.
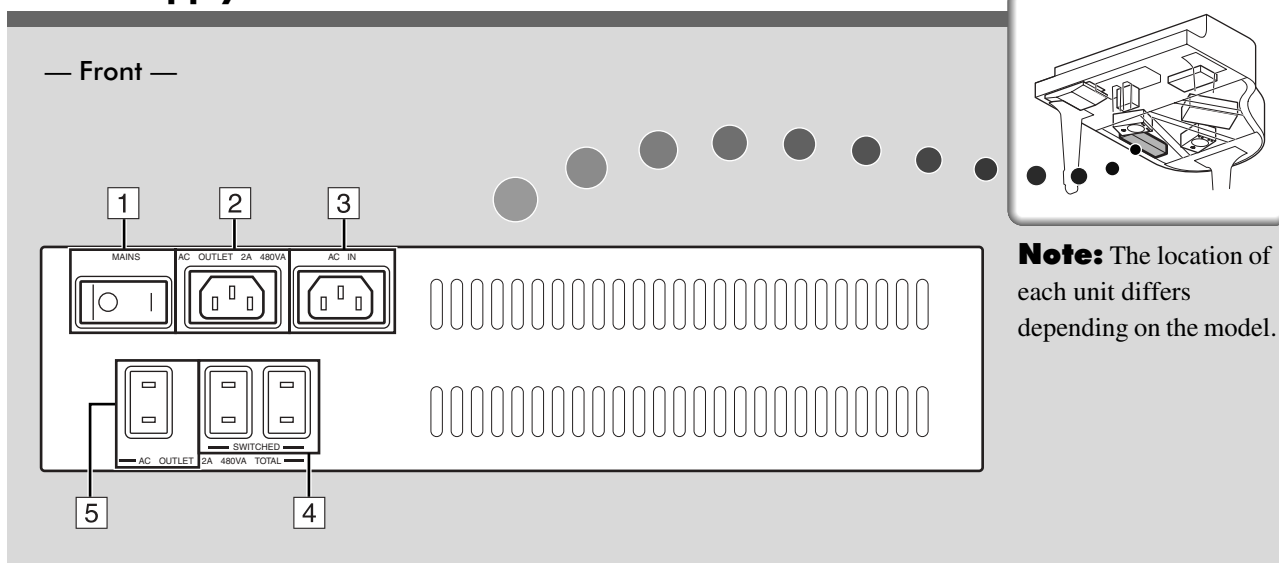
① **MAINS switch**

Turns the Power Supply unit on/off.

② **AC OUTLET**

Accepts the power cable from the I/O Center.

③ **AC IN**

Accepts the power cable from an AC outlet.

④ **AC OUTLET SWITCHED**

Accepts the Monitor speakers' AC power cables.

⑤ **AC OUTLET (unswitched)**

Accepts the AC power cord of the cradle's AC power adaptor.

— Right side —
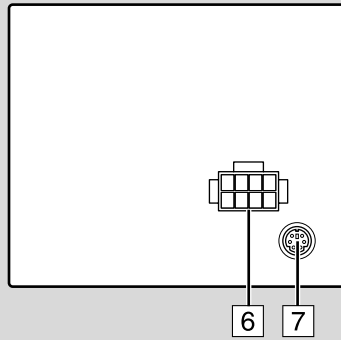
6 **TO DRIVE terminal**

Accepts the power cord from the Key Drive (KD)
unit.

7 **TO CSP terminal**

Accepts the power cable from the Central Signal
Processor (CSP).

Pocket Controller

— Front —
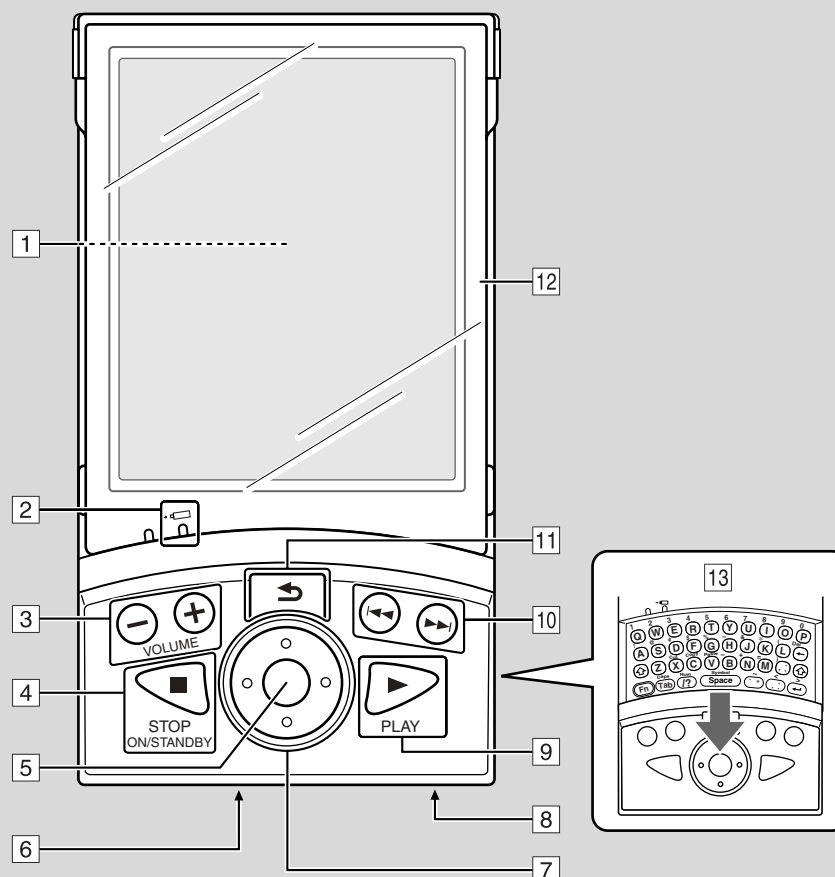
1 **Touch screen**
→ pg. 3 "Tapping with the stylus pen" in "Quick Guide".

2 **Charge indicator (amber)**
Lights up when the Pocket Controller is being charged. The indicator goes out when charging is completed.

3 **VOLUME –/+ buttons**
Adjust the overall volume.

4 ■ **STOP, ON/STANDBY button**
Stops playback, and turns the Pocket Controller on/off.

5 **Select button**
Executes the selected operation.

6 **I/O port**
Accepts the terminal on the cradle.

7 **Cursor buttons**
Selects the item on the touch screen or move the slider on a control bar.

8 **AC adapter jack**
Accepts the AC adaptor.

9 ► **PLAY button**
Starts playback.

10 **◄◄/►►| (Song Select, Fast Reverse/Fast Forward) buttons**
Pressing the button selects a song.
Holding down the button fast reverses/forwards.

11 **↰ (Back) button**
Returns to the previous screen.

12 **Screen protector**
Open or remove the protector when you tap on the touch screen. To remove the screen protector, lift it up and fold it back until it comes off.

13 **Keyboard**
Enters characters. (→ pg. 33 "Entering Characters")

— Rear —

14 **Security eyelet**
Accepts an anti-theft cord.

15 **Speaker**

16 **Battery compartment lid**

17 **RESET button (located inside of the battery compartment lid)**
Resets the Pocket Controller.

18 **Battery replacement switch**
(→ pg. 15 "Preparing the Pocket Controller")

— Top/Left side —
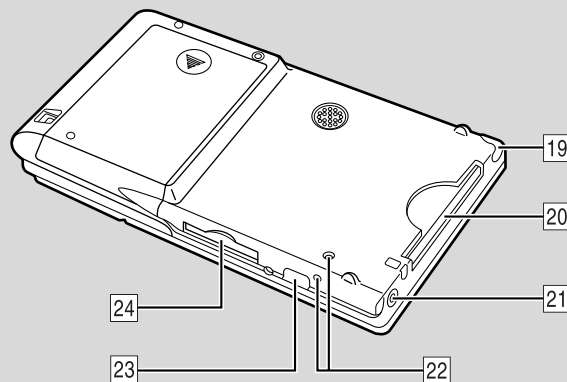
19 **Stylus pen**
For operating the touch screen.

20 **CF card slot**
Holds the CF wireless LAN card.

21 **Stereo headphone jack**
For future use.

22 **Microphone**

23 **IR port**
For future use.

24 **SD card slot**
Holds the SD card.

Cradle
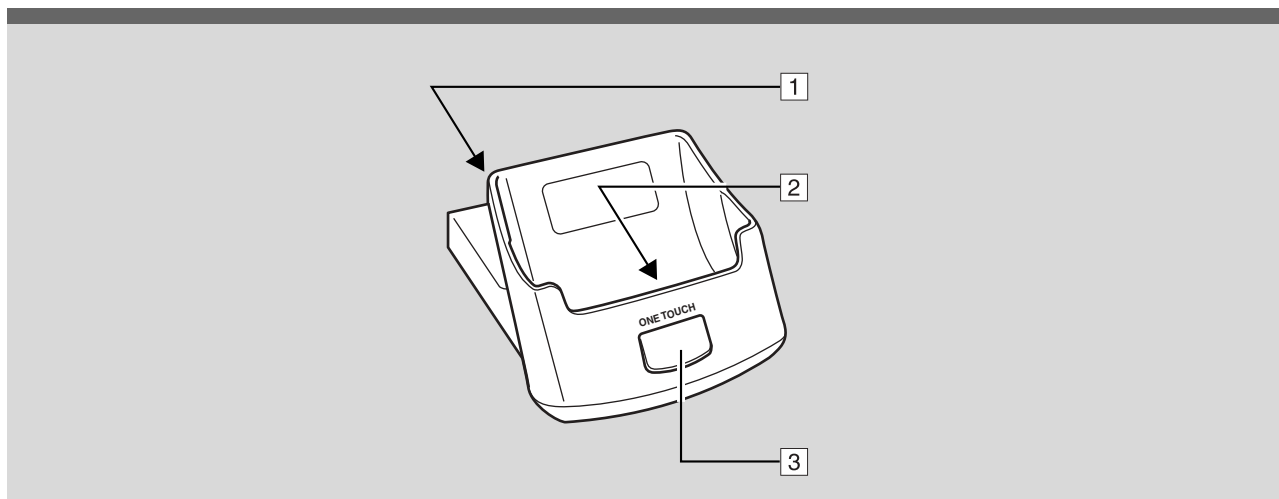
1 **AC adaptor jack**
   Accepts the AC adaptor.

2 **I/O port**
   Accepts the I/O port on the Pocket Controller.

3 **ONE TOUCH button**
   (→ pg. 66 "Assigning a Specific Function to the ONE
   TOUCH Button")

Monitor Speakers*

* Supplied only with the Mark IV Series.

— Front —
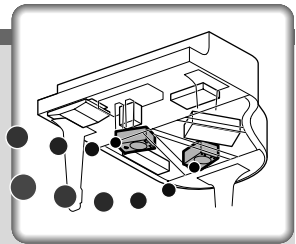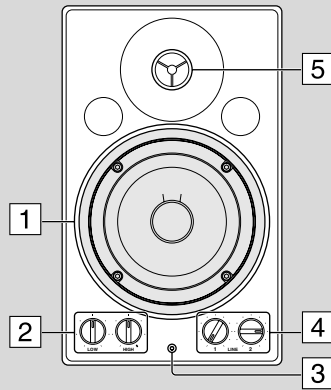
Note: The location of each unit differs depending on the model.

1 **Woofer unit**

2 **LOW/HIGH volume controls**
   Adjust the base/treble sound volume.

3 **Power indicator**
   Lights up while the speaker is turned on.

4 **LINE1/2 volume controls**
   Adjust the sound volume for each line input.

   Note: For normal use, turn down the LINE1 volume completely, and turn up the LINE2 volume at the three o'clock position.

5 **Tweeter unit**

— Rear —
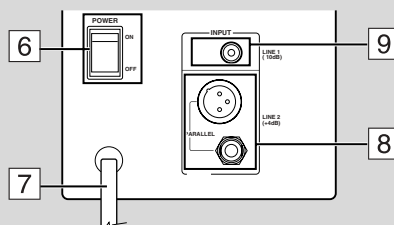
6 **POWER switch**
   Turns the monitor speaker on/off.

7 **AC power cable**

8 **INPUT LINE2 (XLR connector/phone jack)**
   Accepts the line output from the I/O Center or external AV equipment.

9 **INPUT LINE1 (RCA jack)**
   Accepts the line output from external AV equipment.

Setting Up the Disklavier

Installing the Media Center

1 Screw the supplied screws into the nuts.

Nuts

Leave 5 mm of the shank.

Screws (M5 x 16) (supplied)

2 Hang the Media Center.

Note: When you hang the Media Center, be sure to hold the unit securely with both hands preventing the unit from falling down.
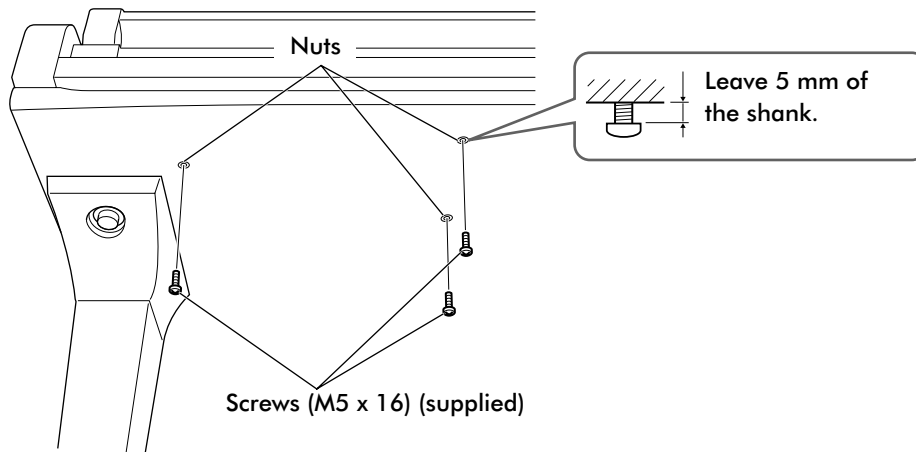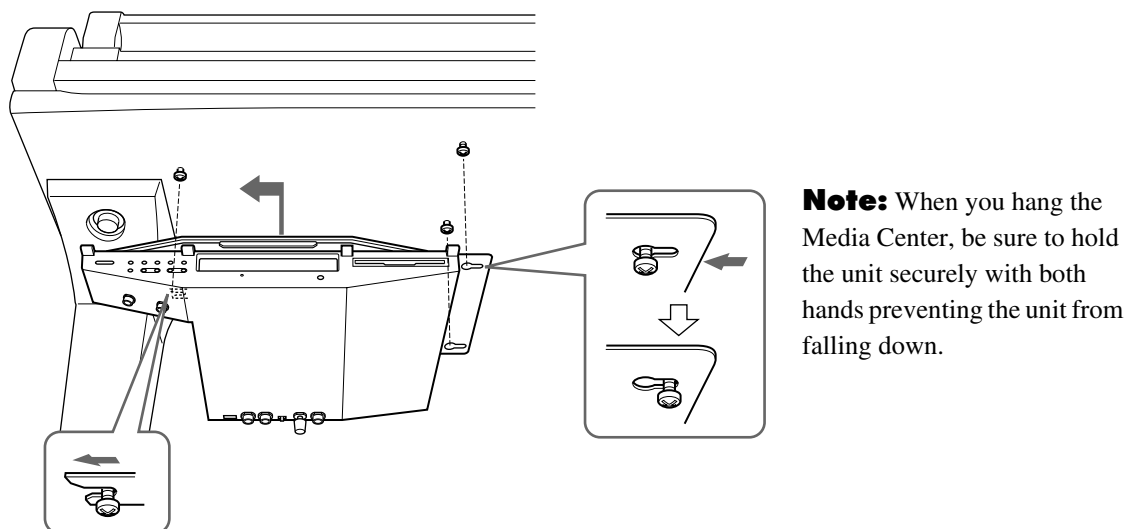
3 Tighten the screws to secure the Media Center.

Installing the Monitor Speaker (for the Mark IV Series only)

1 Attach the hanger to the bottom.

Slant installation   *Horizontal installation*
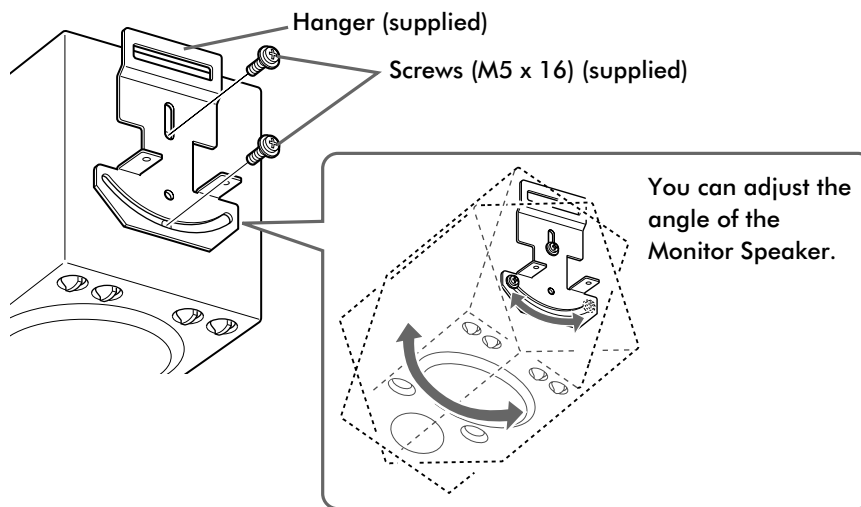
Hanger (supplied)

Screws (M5 x 16) (supplied)

You can adjust the angle of the Monitor Speaker.
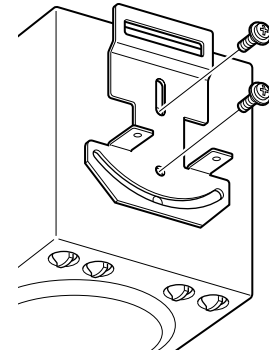
2 Connect the speaker cord to the INPUT LINE2 phone jack. (→ pg. 13 "Wiring the Disklavier")

3 Hang the Monitor Speaker to the bracket.

Bracket
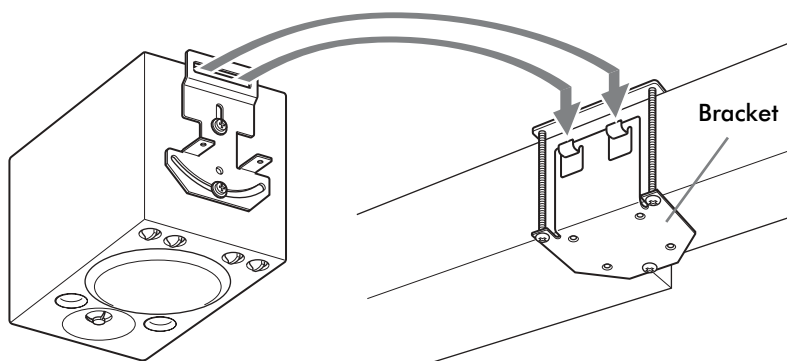
Note: When you hang the Monitor Speaker, be sure to hold the unit securely with both hands preventing the unit from falling down.

4 Screw the thumbscrews to secure the Monitor Speaker.

Thumbscrews (M4 x 15) (supplied)
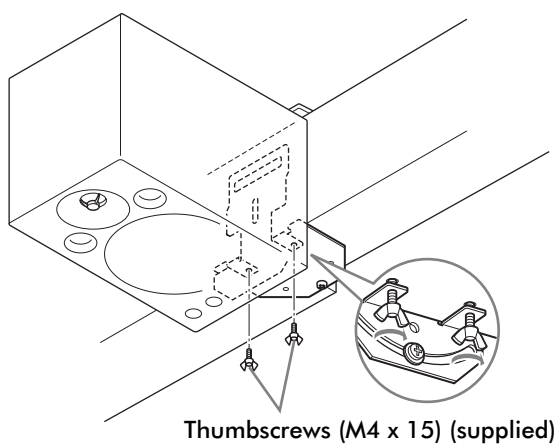
Wiring the Disklavier

Note: The location of each unit differs depending on the model.

Media Center

I/O Center

Cable

Power Supply unit

Monitor speaker (left)

Monitor speaker (right)

Speaker cord*

Speaker cord*

I/O Center
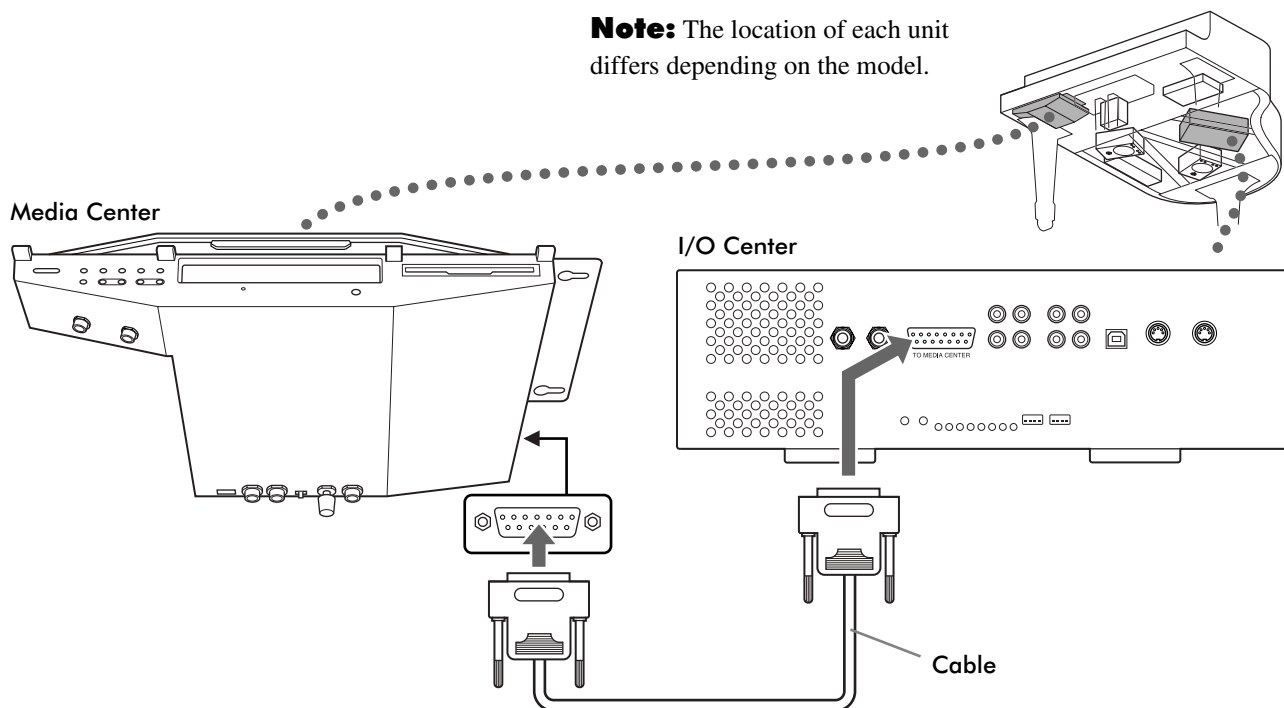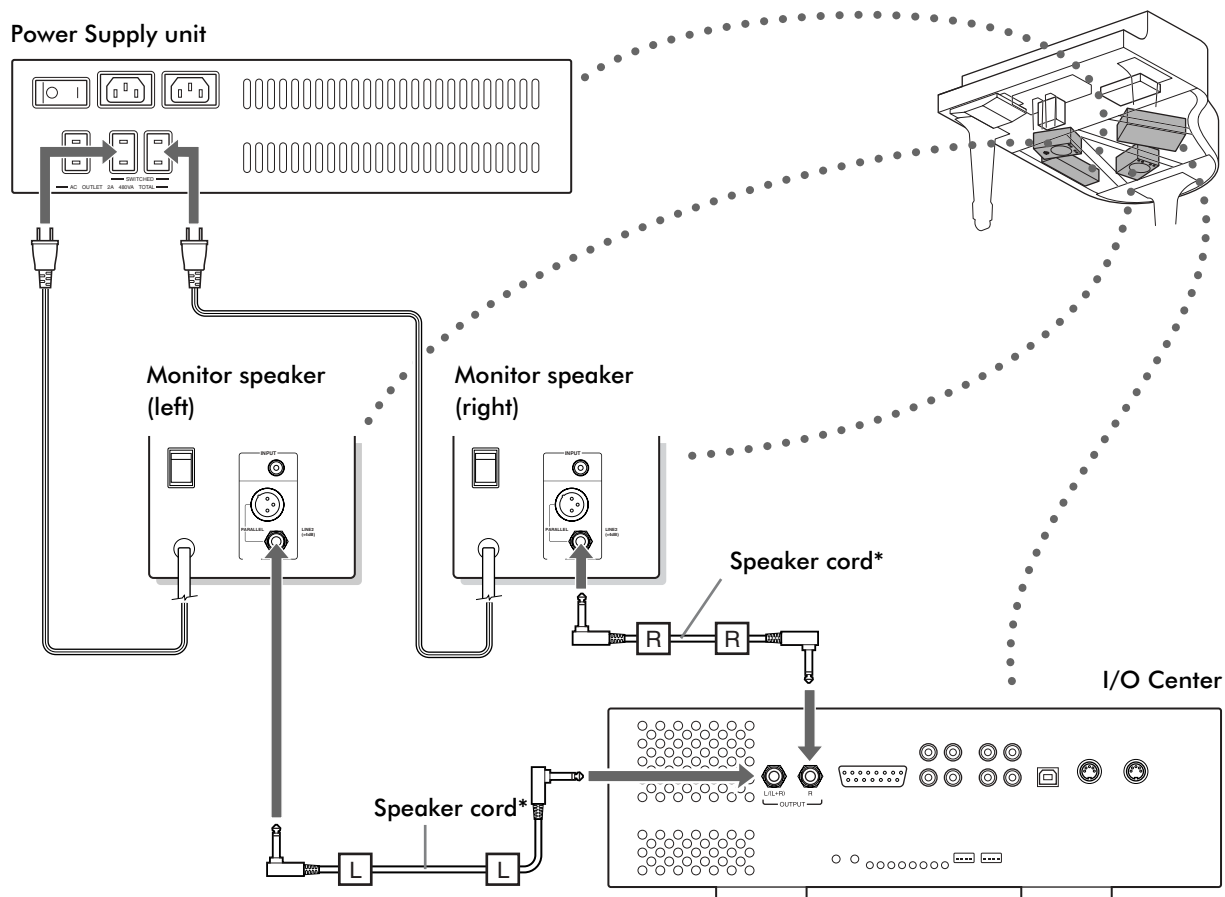
Note: Monitor speakers are supplied only with the Mark IV Series.

*	When you replace the speaker cord, prepare the cord equivalent to the supplied one that has L-shaped phone jacks at both ends.

Central Signal Processor

TO PD   TO MD   TO SENSOR

SENSOR

AC power cord   AC power adaptor   Cradle

Power Supply unit

AC OUTLET 2A 480VA   AC IN

AC OUTLET 2A 480VA TOTAL

Power cable

To AC wall outlet

Mini-DIN cable*

PS   PS

Central Signal Processor

TO PS   GREEN TO I/O   BLUE CENTER

Power cable*

Blue marks

RCA cords*

Green marks

I/O Center

OFF   ON
MAINS

DIGITAL OUT   TO PIANO
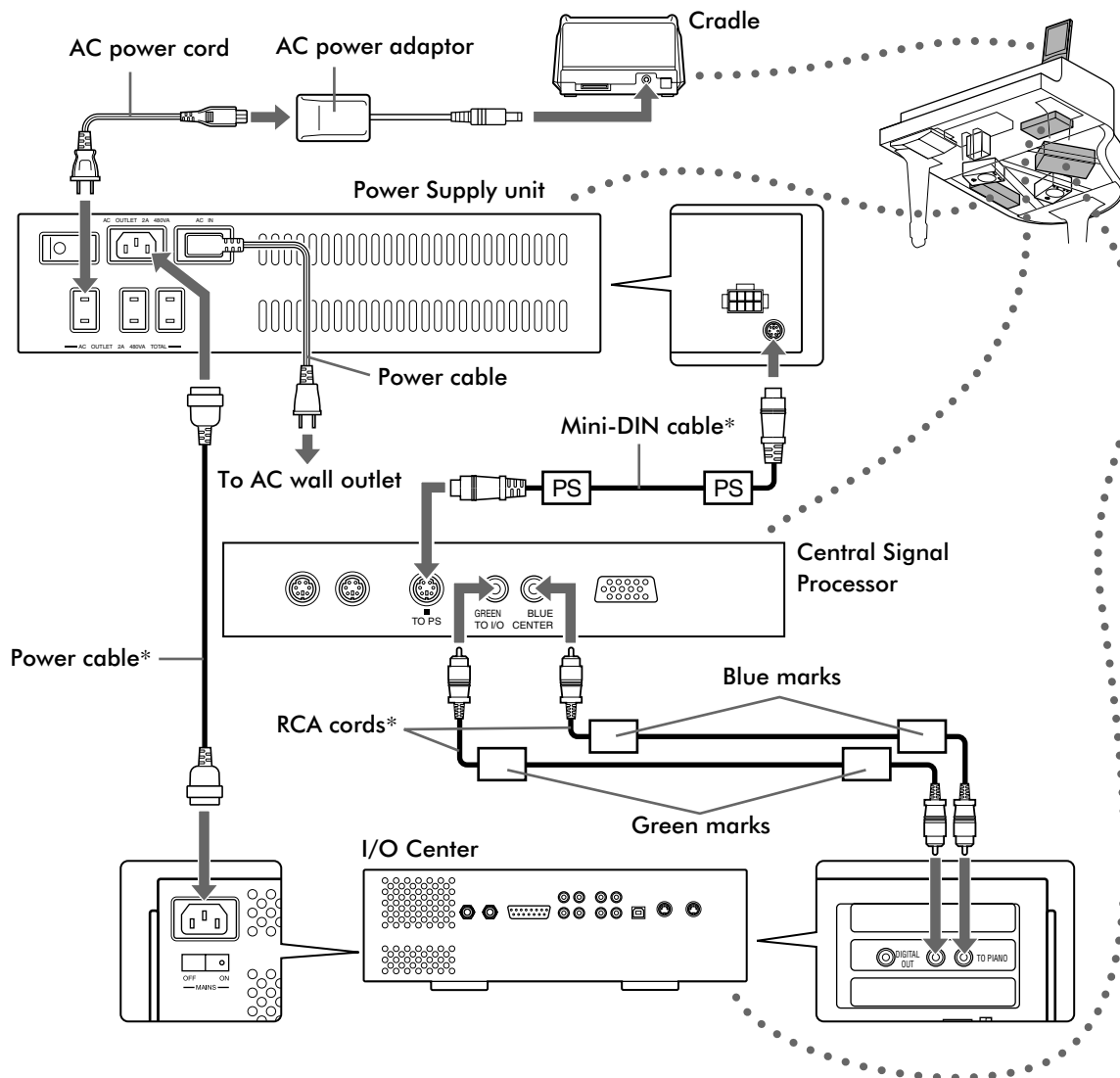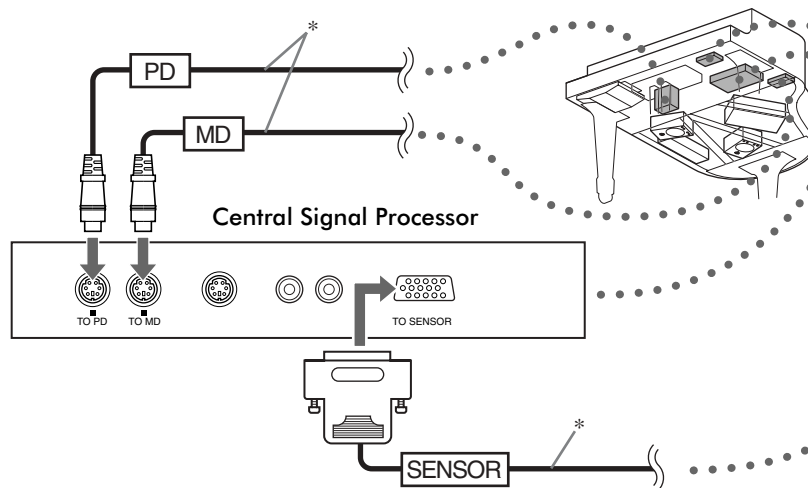
Note: Be sure to connect the Power Supply unit's power cable to an AC wall outlet after all other connections are done.

*   *These cords/cables are hooked up at the factory.*

Preparing the Pocket Controller

1 Remove the card slot protector, and then insert the supplied CF wireless LAN card into the CF card slot.

2 Set the battery replacement switch to the [REPLACE BATTERY] position.

NORMAL OPERATION
REPLACE BATTERY
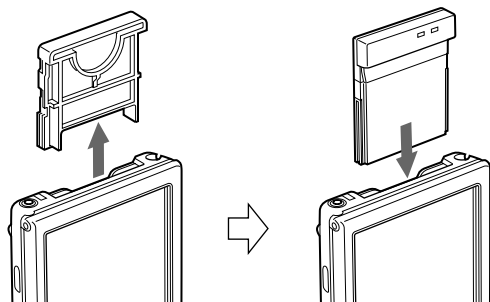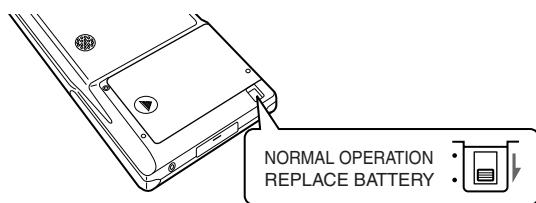
3 Put the rechargeable battery into the battery compartment.

Make sure that the ◀, ⊖ and ⊕ marks on the battery are aligned correctly with those printed inside the battery compartment.
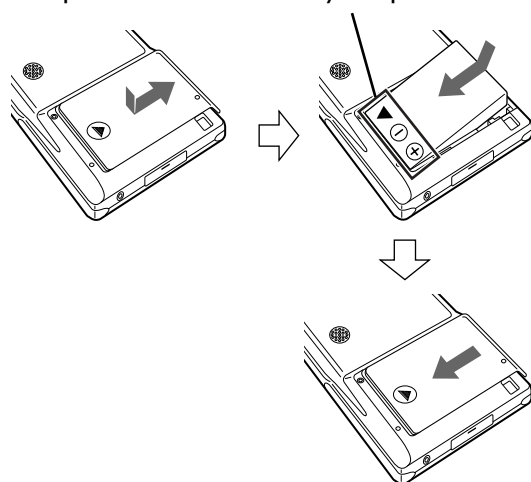
4 Set the battery replacement switch back to the [NORMAL OPERATION] position.

5 Remove the I/O port cover, and then set the Pocket Controller on the cradle.

I/O port cover
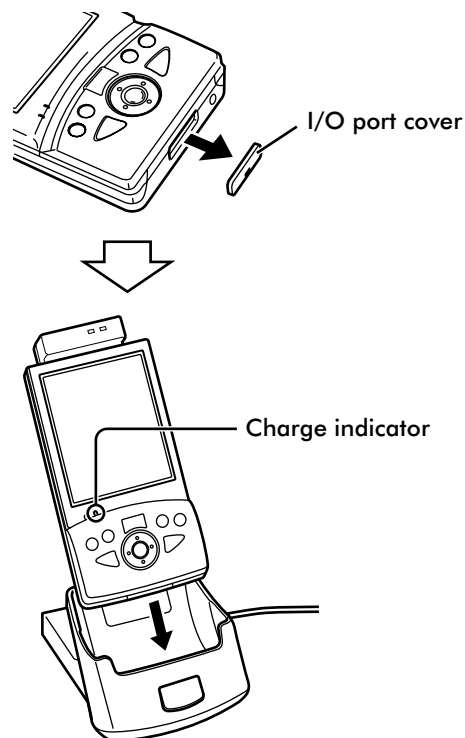
Charge indicator

Charging starts and the charge indicator lights amber. When the battery is fully charged, the indicator goes out.

Initial Settings of the Pocket Controller

The following functions are available to control the Disklavier remotely. Set up a variety of useful functions to your preference.
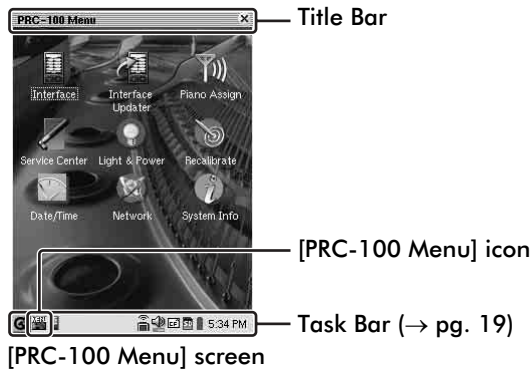
[PRC-100 Menu] screen

Tip: Tap on 🔳 ([PRC-100 Menu] icon) to return to the [PRC-100 Menu] screen.

🔳 [Interface]: Usually utilize this function to control the Disklavier remotely. The [Main] screen is the top menu of this function. (→ pg. 12 in "Quick Guide")

🔳 [Interface Updater]*: Updates the [Interface].

🔳 [Piano Assign]*: (→ pg. 18 "Pairing the Pocket Controller and the Disklavier")

🔳 [Service Center]*: (→ pg. 66 "Diagnosing the Disklavier")

🔳 [Light & Power]*: Makes energy conserving settings.

🔳 [Recalibrate]: (See "Calibrating the Touch Screen" below.)

🔳 [Date/Time]: (See "Setting up the Current Date and Time" below.)

🔳 [Network]*: Lists available network services.

🔳 [System Info]*: Shows system information (memory, storage, version).

For normal use, modification of these setups are not required.

Calibrating the Touch Screen

The following procedure calibrates the touch screen to improve the accuracy of the tapping operation.

Tap on 🔳 [Recalibrate] in the [PRC-100 Menu] screen, and then firmly tap on the cross hairs that appear in sequence one by one.
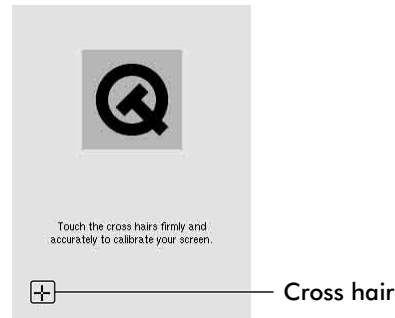
When the recalibration is completed, the [PRC-100 Menu] screen resumes.

Setting up the Current Date and Time

1 Tap on 🔳 [Date/Time] in the [PRC-100 Menu] screen.

[Set System Time] screen
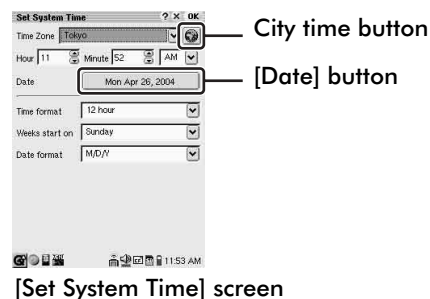
2 Tap on [Time Zone] 🔽, and then on your time zone in the drop down list.

Note: If your time zone does not appear in the drop down list, add the zone to the list by following the procedure in "Adding Your City to the [Time Zone] Drop Down List" on page 17, and then repeat step **2**.

Continue to next page...

16

3 Tap on [Hour]/[Minutes] 🖐 to set the time.

4 Tap on [Time format] 🔽, and then select the desired format.

5 Tap on 🔽, and then on [AM] or [PM], if necessary.

6 Tap on the [Date] button, and then tap on current date on the mini-calendar that appears.

7 Tap on [Weeks start on] 🔽, and then tap on [Sunday] or [Monday] that is to be shown as the first day of the week in the mini-calendar.

8 Tap on [Date format] 🔽, and then on the desired format.

9 Tap on **OK** on the title bar.

The [PRC-100 Menu] screen resumes.

10 Reboot the Pocket Controller.

(→ "Rebooting the Pocket Controller" below)

Adding Your City to the [Time Zone] Drop Down List

1 Tap on 🌐.
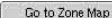
2 Tap on the time zone to be replaced with your desired city.
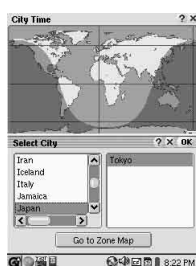
3 Tap on your country, and then on your city in the list.

4 Tap on **OK** on the "Select City" title bar.

To correct the city selection, tap on
Go to Zone Map , and then perform step **2** thru **4** again.

Rebooting the Pocket Controller

When a problem occurs, first see the "Troubleshooting" on page 82. If the problem persist, follow the procedure below.

1 Tap on 🌐 on the task bar.

2 Tap on [Reboot] on the menu that appears.

3 Tap on Yes .

The [Main] screen appears after approximately three minutes.

4 Reset the Pocket Controller.

(→ pg. 18 "Resetting the Pocket Controller")

Resetting the Pocket Controller

When rebooting cannot be performed or the Pocket Controller does not work correctly even after rebooting, follow the procedure below.

1 Turn the Disklavier off.

(→ pg. 6 "Turning the Disklavier Off (Standby Mode)" in "Quick Guide")

2 Connect the AC adapter to the AC adaptor jack, and then set the battery replacement switch to the [REPLACE BATTERY] position.

NORMAL OPERATION
REPLACE BATTERY
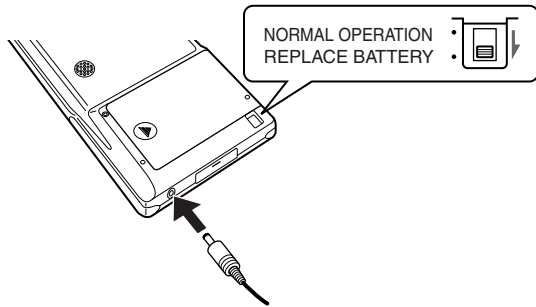
3 Wait for five seconds, remove the battery compartment lid, and then press the [RESET] button with the stylus pen.

RESET
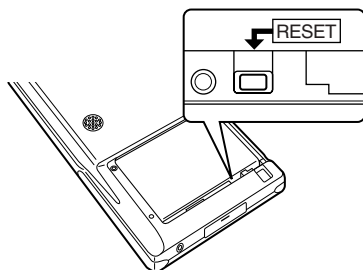
4 Replace the battery compartment lid, and then set the battery replacement switch back to the [NORMAL OPERATION] position.

5 Press ▶ to turn the Pocket Controller on.

The [Main] screen appears after approximately two minutes.

Pairing the Pocket Controller and the Disklavier

For normal use, this setup is not required.

1 Make sure that other wireless equipment is turned off.

2 Tap on 📶 [Piano Assign] in the [PRC-100 Menu] screen.

3 Move the Pocket Controller close to the Disklavier, and then tap on ⬚OK⬚.
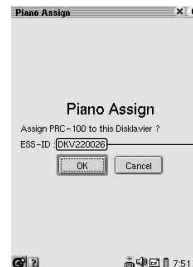
ESS-ID number

4 Tap on ⬚OK⬚.

5 Tap on ⬚OK⬚ on the [Assigned successfully] screen. The [PRC-100 Menu] screen resumes.

Note: Do NOT abort the procedure before step 4. Otherwise you cannot control the Disklavier.

English

Description of the Task Bar

The task bar is always displayed at the bottom of the screen to show various information and status of the Pocket Controller. Tapping on the icon shows the respective setup screen, etc.

![icon] :	Shows the function menus such as [Reboot], etc.
![icon] :	Shows the wireless connection status. Blue: Excellent Green: Good Yellow: Average Red: Poor
![icon] :	No connection (Tap to show the detailed Network screen.)
![icon] :	Shows the volume of the Pocket Controller itself. (Tap on it, and then move the slider up or down to adjust the volume.)
![icon] :	Tap on it, and then on [Eject card] before you remove the CF card.
![icon] :	Tap on it, and then on [Eject SD-card] before you remove the SD card.
![icon] :	Shows the battery status. Blue: Good Yellow: Low Red: Very low Green: Charging
1:46 PM :	Shows the current time. (Tap on it to open the [Set System Time] screen.)

Basic Precautions for Using Floppy Disks and CDs

Handling Floppy Disks

In order to protect data stored on floppy disks from damage or loss, be sure to handle them with care, and observe the following precautions.

- Do not touch the surface of the internal disk.
- Do not store or place disks near a television, radio, loudspeaker, or any other device that generates a magnetic field.
- Do not expose disks to extreme temperature or humidity. The working temperature range for disks is between 4°C and 52°C (40°F and 125°F).
- Do not use disks in a dusty, dirty, or smoky environment.
- Remove the disk from the floppy disk drive before turning the Disklavier off.

Write Protection

Floppy disks have a write protection tab to keep from accidentally formatting the disk or erasing files.
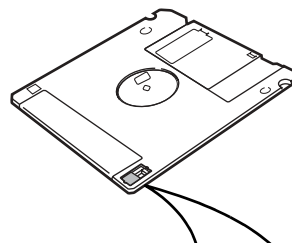
Protected	Unprotected
The tab window is open.	The tab window is closed.
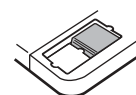
Loading and Ejecting a Floppy Disk

Loading

Push the disk until it clicks into place.

Floppy disk drive on the Media Center
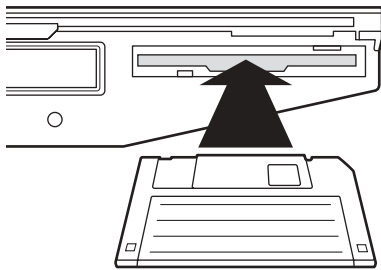
Ejecting

Press the eject button on the Media Center.

Eject button
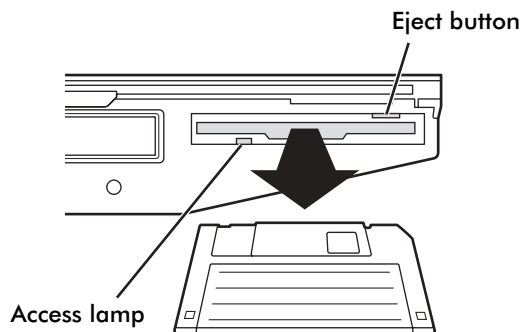
Access lamp

Note: Do not eject the floppy disk while the access lamp is flashing or lit. Doing so can seriously damage the disk and the floppy disk drive as well.

Handling CDs

In order to protect data stored on compact discs from damage or loss, handle them with care, and observe the following precautions.

- Do not touch the surface of a CD.
- Do not expose CDs to extreme temperatures or humidity. The working temperature range is between 4°C and 52°C (40°F and 125°F).
- Wipe CDs with a clean cloth before playback.
- Remove the CD from the CD drive before turning the Disklavier off.

Loading a CD

Loading

1 Press ⬤ OPEN/CLOSE on the Media Center to open the CD tray.

2 Place the CD on the tray, and then press ⬤ OPEN/CLOSE to close the tray.

Labeled side

CD tray on the Media Center
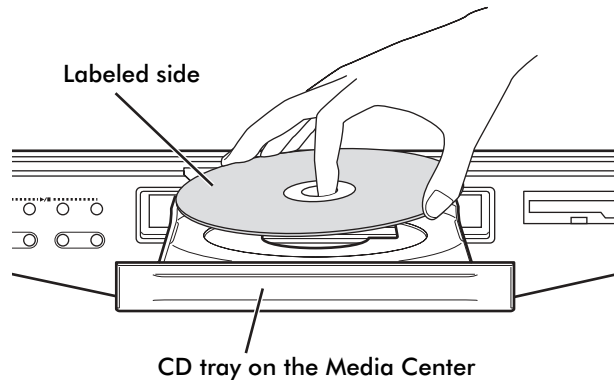
Available File Format and Structure of Data in the Removable Media

CDs

The files should be formatted in ISO 9660 LEVEL1.

Floppy Disks (2DD,2HD)

- The files should be formatted in MS-DOS.
- The Disklavier reads only the files nested in the root directory.

USB Flash Memories

The files should be formatted in FAT16 or FAT32 file system.

USB Hard Disk Drives

The files should be formatted in FAT32 file system.

Continue to next page...

English

Notes on the limitation of the compatible file format

- **SMF format 0:** For playback and recording.
- **SMF format 1:** For playback only.
- **E-SEQ:** For playback and overwrite recording.
- The name of the SMF file should have an extension as ".MID" or ".mid".
- The name of the E-SEQ file should have an extension as ".FIL" or ".fil".

Notes on the files created on the Disklavier PRO Series

The song file created on the Disklavier PRO Series contains various data that enable high-accuracy in song playback. However, those data can not produce any expected results and, moreover, may control the keys unnaturally when the song file is modified on the external MIDI device such as sequencer, etc. The above mentioned problem does not occur in the following cases:

- When the song file stored/loaded in the Disklavier PRO Series is played back on the Disklavier PRO Series through an external MIDI device without any modification on that device.
- When the song file is output from the [MIDI OUT] terminal or the [USB •⇆•] port on the front of the I/O Center and played back on another MIDI device. Any modifications are available.
- When the following event is deleted from the song file.
  A0 kk dd : Polyphonic Key Pressure
  A1 kk dd : Polyphonic Key Pressure

  B0 10 dd : Control Change (General Purpose)
  B1 10 dd : Control Change (General Purpose)

  B0 51 dd : Control Change (General Purpose)
  B1 51 dd : Control Change (General Purpose)

2

Song Playback Features

Changing the Playback Tempo

This could be useful, for example, when listening carefully to a piano part at slow tempo, and also when practicing a difficult piano part at slow tempo.

1 Select the desired song. (→ pg. 12 "Selecting a Song" in "Quick Guide")

2 Tap on `Tempo` in the [Song] screen.

3 Tap on `–`/`+` to adjust the tempo value, and then on `Tempo`.

The adjusted value appears instead of the character, [Tempo] on `Tempo`.

To resume the original tempo, tap on `Reset` in step **3**.

> **Tip:** The value can be adjusted from -50% to +20% in 1% increments.

Playing Back Songs in a Different Key (Transposition)

This could be useful, for example, when you want to sing along in a more comfortable key.

1 Select the desired song. (→ pg. 12 "Selecting a Song" in "Quick Guide")

2 Tap on `Trans.` in the [Song] screen.

3 Tap on `–`/`+` to adjust the transposition value, and then on `Trans.`.

The adjusted value appears instead of the character, [Trans.] on `Trans.`.

To cancel the transposition, set the value to [0] in step **3**.

> **Tip:** The song can be temporarily transposed in half-step keys up or down two octaves (-24 to +24).

Note: Care must be taken when transposing songs on CDs, as increasing or decreasing the transposition value too much may have an adverse effect on sound quality.

Repeating Song Playback

This could be useful, for example, when providing non-stop background music at a party.

1 Select the desired song. (→ pg. 12 "Selecting a Song" in "Quick Guide")

Playback options

Tap on ▼/▲ in the [Song] screen to show the desired playback options.
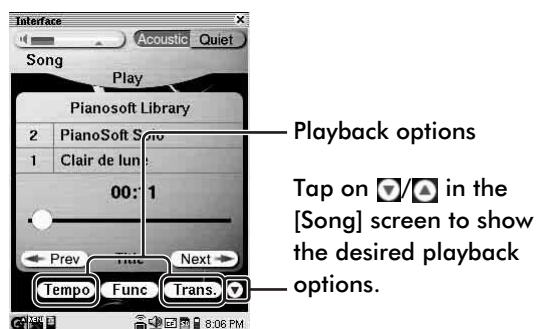
2 Tap on ▼ in the [Song] screen.

3 Tap on [Repeat].

4 Tap on the desired repeat mode, and then on [Repeat].

[ALL]: Repeats all songs in the current album.
[RPT]: Repeats the current song only.
[RND]: Repeats all songs in the current album in random order.
The selected mode appears instead of the character, [Repeat] on [Repeat].

To cancel repeat mode, tap on [OFF] in step **4**.

Repeating a Specific Section of a Song (A-B Repeat)

In addition to the A-B Repeat feature, you can locate the registered points (point A and B) during playback and fast-reversing/forwarding.

1 Select the desired song. (→ pg. 12 "Selecting a Song" in "Quick Guide")

2 Tap on [Next ➡] repeatedly in the [Song] screen until the following screen appears.
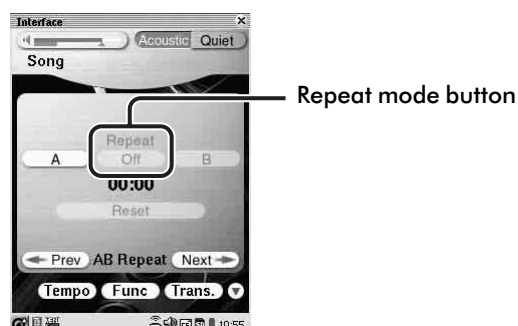
Repeat mode button

3 Press ▶ to start playback.

4 Tap on [A] at the beginning of the section you want to repeat (point A).

5 Tap on ⟨ B ⟩ at the end of the section you want to repeat (point B).

The beginning of the section is located and playback stops.
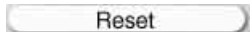
6 Tap on the Repeat mode button repeatedly to select the desired mode.

⟨ ⬅ ⟩ : When point B is reached, the beginning of the section is located and playback stops.

⟨ ⟲ ⟩ : When point B is reached, the beginning of the section is located and playback starts.

⟨ Off ⟩ : Repeat mode is canceled but points A and B are retained.

To locate the registered points (point A and B) during playback or while stopped, tap on ⟨ A ⟩ or ⟨ B ⟩.

Tip: You can also locate a point by fast-reversing/forwarding between points A and B.

To clear the registered point, tap on ⟨ Reset ⟩.

Playing Back Only the Desired Piano Part

This could be useful, for example, when listening carefully to one part, and also when you practice only the left- or right-hand part while the Disklavier plays the other.

1 Select the desired song. (→ pg. 12 "Selecting a Song" in "Quick Guide")

Playback options

Tap on ▼/▲ in the [Song] screen to show the desired playback options.

2 Tap on ▼ in the [Song] screen.

3 Tap on ⟨ Part ⟩.

Left-hand part

Right-hand part

Pedal part

Accompaniment part

Tip: Tapping on ⟨ Next → ⟩ in step **1** also shows this screen.

Continue to next page...

English

4 Tap on the desired part to change its setting (play or mute).

Each time you tap on the part, its setting changes as follows showing the status with the color of the part icon:

Play (green) ←→ Mute (white)
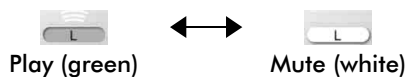
Note: Blank part (shown in yellow) contains no sound and you cannot change the setting.

Adjusting the Volume Balance among the Keyboard Playing, Ensemble Sound, Software Playback, and Microphone's Input

Besides adjusting the overall volume, the volume balance among the different sound sources as described below can be adjustable.

[Voice]: Adjusts the volume of the digital piano sound* that you play on the Disklavier's keyboard in Quiet/Headphone mode. (→ pg. 16 "Basic Piano Playing" in "Quick Guide")

* Note that this setting has no effect on the volume of the pre-recorded piano part in the software.

[TG]: Adjusts the volume of the ensemble sound reproduced by the tone generator (TG) of the Disklavier.

[Audio]: Adjusts the volume of the accompaniment or standard audio sound pre-recorded in the software (CDs).

[MIC]: Adjusts the volume of the sound input from the microphone.

1 Tap on .
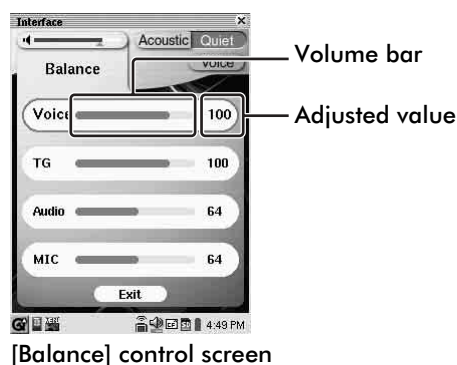
[Balance] control screen

2 Tap on the desired point on the volume bar of the desired sound to adjust its value.

Tip: Pressing also adjust the value.

3 Tap on Exit to clear the [Balance] control screen.

Utilizing the Play Lists

By creating play lists of your favorite songs, you can program your Disklavier to automatically play back a series of songs, not to mention eliminate the trouble of changing CDs, floppy disks, or USB flash memories each time you want to listen to songs on a different medium. First create your own play list, and then play back that list by following the procedures below.

Adding the Desired Song to the Play Lists

1 Select the desired song or album (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on Func or Function.

Function Menu appears.

2 Tap on ⌊Add to PlayLists⌋.
To cancel this operation, tap on ⌊Func⌋.

3 Tap on ⌊PlayList⌋, and then on the destination list (album) if necessary.

Tap to cancel the
selection.

4 Tap on ⌊OK⌋.

5 Tap on ⌊OK⌋ after the completion message appears.

Note: If necessary, change the order of the songs in the lists (albums). (→ pg. 54 "Rearranging the Order of Songs/Albums")

Playing Back the Desired Songs in the Desired Order

Select the Play Lists that you created in the above procedure (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then press ▶.

Temporarily Changing the Voice of a Track

You can change the voice of the ensemble tracks to your preference. For details on the track structure, see "Ensemble Part Recording and Track Structure" on page 45.

1 Select the desired song. (→ pg. 12 "Selecting a Song" in "Quick Guide")

2 Tap on ⌊Next⌋ once in the [Song] screen.

3 Tap on ⌊Ensemble⌋.
The track information screen appears.

Track list

English

4 Tap on the desired track number to be edited in the track list.

Selected track
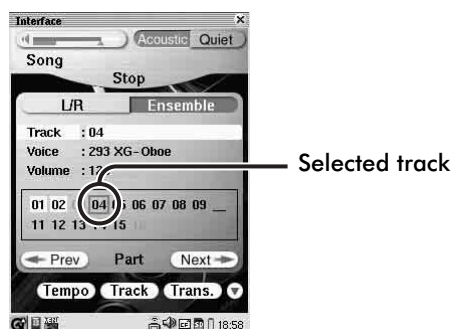
5 Tap on [Voice].

The voice list screen appears.

Group name

Voice name

Tap to close the list.
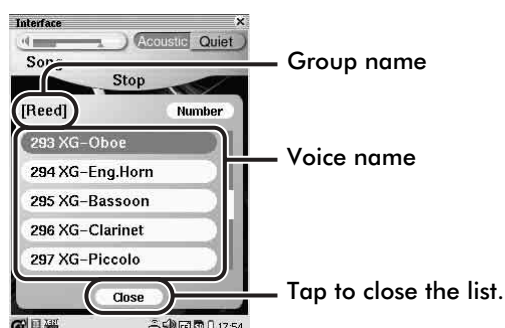
6 Tap on the desired voice name.

Tip: You can also select the desired voice by specifying the voice number. Tap Number, and the voice number selection screen appears.

Tap to cancel selection.
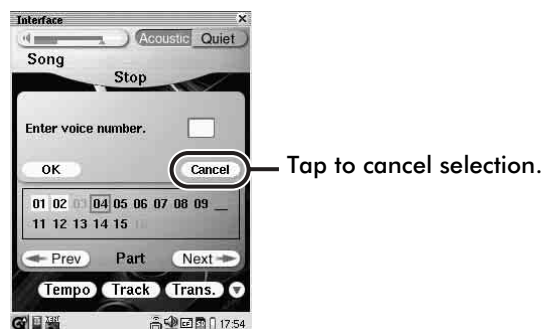
Confirm the desired voice number referring to "Ensemble Part Playback Voice List" (→ pg. 68), enter the number with the keyboard on the pocket controller, and then tap on OK.

7 Tap on Close.

To adjust the volume of the track, tap [Volume], and then press 🔖 🔖.

Editing Tracks

You can edit the existing ensemble tracks to your
preference by using the following options.

[Mix Track]:
>This could be useful for saving tracks by mixing two
tracks.

[Move Track]:
>This could be useful for changing the voice by
moving a track.

[Copy Track]:
>This could be useful for creating unison parts by
copying and pasting a track.

[Delete Track]:
>Deletes an unwanted track.

[Transpose Track]:
>This could be useful for arranging existing ensemble
parts. For example, when you have transposed a
specific track to suit its instrument voice in advance,
you can transpose other tracks in the same key.

Mix/Move/Copy Track

1 Select the desired song. (→ pg. 12
"Selecting a Song" in "Quick Guide")

2 Tap on Next→ once on the [Song]
screen.

3 Tap on Ensemble .
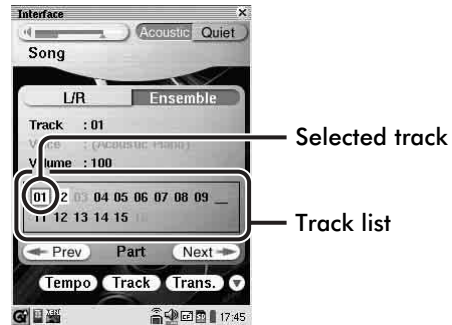
The track information screen appears.

Each track number in the track list is colored
depending on its status.

Black:
>Recorded track

Gray:
>Blank track

With white background:
>Track assigned to a piano part

Underlined:
>Track assigned to a rhythm part

4 Tap on the desired track number to
be edited in the track list.

5 Tap on Track .

English

6 Tap on the desired edit track option button (Mix Track , Move Track , or Copy Track).

[Mix Track] screen

Destination track button

Tap to cancel editing.
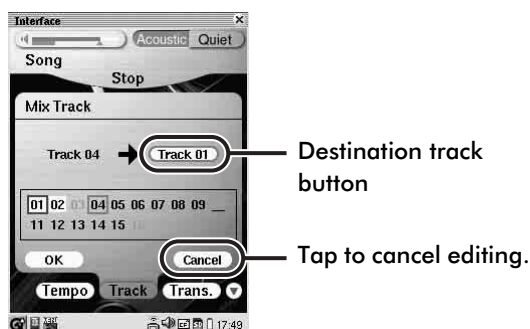
[Move Track] screen

[Copy Track] screen

7 Tap on the destination track button.

The destination track selection screen appears.

Tap to cancel selection.

8 Tap on the destination track number.

[Mix Track]:

The track selected in step **4** will be mixed with the destination track.

[Move Track]:

The destination track will be overwritten by the track selected in step **4** (the selected track will be blank).

[Copy Track]:

The destination track will be overwritten by the track selected in step **4** (the selected track will be retained).

9 Confirm that the destination track number is marked with a blue square, and then tap on OK .

10 Tap on OK after the completion message appears.

Delete Track

1 Perform steps **1** thru **5** in "Editing Tracks (Mix/Move/Copy Track)".

2 Tap on Delete Track .

Tap to cancel editing.

3 Tap on OK .

4 Tap on OK after the completion message appears.

Transpose Track

1 Perform steps **1** thru **5** in "Editing Tracks (Mix/Move/Copy Track)". (→ pg. 28)

2 Tap on Transpose Track .
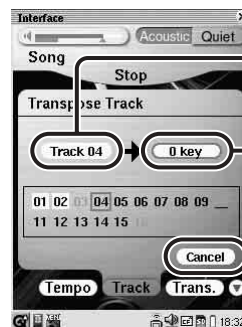
Selected track button

Key change button

Tap to cancel editing.

3 Tap on the key change button.

The key change screen appears.

Continue to next page...

4 Tap on ⊏ − ⊐/⊏ + ⊐ to adjust the transposition value, and then tap on ⊏ Close ⊐.

> **Tip:** The track can be transposed in half-step keys up or down (–60 to +60).

5 Tap on ⊏ OK ⊐.

> **Tip:** To transpose all the tracks, tap on the selected track button. The selected track number indication changes to [All Tracks]. Note that the rhythm track cannot be transposed.

6 Tap on ⊏ OK ⊐.

7 Tap on ⊏ OK ⊐ after the completion message appears.

Checking and Modifying the Song Information

Checking the Song Information (Song-Info Screen)

You can check the following information of the selected song:

[Song Type]: Shows the type of the software.

[Length]: Shows the total playback time.

[Date]: Shows the recording/modification date.

[File Name]: Shows the file name.

[Last Played]: Shows the latest playback date.

[Play Count]: Shows the number of times the song has played in its entirety.

[Copyright]: Shows the copyright.

1 Select the desired song. (→ pg. 12 "Selecting a Song" in "Quick Guide")

2 Tap on ⊏ Next ➡ ⊐ repeatedly in the [Song] screen so that the following screen appears.

Song-Info screen

Checking and Modifying the Song Information (Song-Tag screen)

You can modify the following information of the selected song:

[Song Title]: Modifies the title of the song.

[Rate]: Modifies the arbitrary rating by changing the number of the star icons.

[Comment]: Modifies your comment.

1 Select the desired song. (→ pg. 12 "Selecting a Song" in "Quick Guide")

2 Tap on Next→ repeatedly in the [Song] screen so that the following screen appears.

Song-Tag screen

3 Tap on the title of the desired information.

For [Song Title] and [Comment]
The text box for the selected information title appears.

Tap to cancel the modification.

For [Rate]
The selected title ([Rate]) is highlighted.

4 Modify the information.

For [Song Title] and [Comment]
Modify the information, and then tap on OK.
For details on modifying the information, see "Entering Characters" on page 33.

For [Rate]
Press to select the rating (shown by the number of the stars).

English

Entering Characters

1 Slide the front panel of the Pocket Controller to show the keyboard.

2 Press a key to enter the corresponding letter.

Keys	Will enter lowercase letters on respective keys.
⇧ (Shift)	Will shift the mode to enter "UPPERCASE" letters or lowercase letters when the Caps lock key is active.
Fn	Will enable the entry of numbers and symbols printed on the keyboard in yellow.
Fn Tab (Caps)	Will change the entering mode to enter uppercase (capital) letters (Caps lock). To cancel the function, press Fn Tab again.
Space	Will insert a space.
Tab	Will act as a tab key. On the Edit screen, the cursor will move to the next field.
← (Back space)	Will delete the character to the left of the cursor.
Fn ← (Delete)	Will delete the character to the right of the cursor.
Fn /? (Num)	Will change the entering mode to enter numbers (Num lock) and symbols. To cancel the function, press Fn /? again.
↵ (Carriage return)	Will start a new line.
Fn X (Cut)	Will cut the selected text.
Fn C (Copy)	Will copy the selected text.
Fn V (Paste)	Will paste the selected text.

Presetting Playback Control Options for Each Song

You can customize the manner of playback for each song in advance.

[Piano Part Ch L]:

Selects the desired channel ([01] thru [16]) to which you assign the left-hand part or not ([##]).

[Piano Part Ch R]:

Selects the desired channel ([01] thru [16]) to which you assign the right-hand part or not ([##]).

[Piano Velocity Curve]:

In acoustic mode, the loud notes may get distorted when you play a MIDI song designed not for acoustic piano playback, but for a certain instrument voice. In such a case, you can automatically adjust only the volume of the acoustic piano part moderately without changing the volume of other parts.
Select the desired acoustic piano volume ([Soft 85] thru [Soft 20]), or select [Thru] to inactivate this function.

Note: The smaller the [Soft] value, the softer the volume becomes.

[Main Volume Adjust]:

Adjusts the overall volume.

[Audio Volume Adjust]:

Adjusts the volume of the accompaniment or standard audio sound pre-recorded on the software (CDs).

[Audio Pitch Adjust]:

Adjusts the pitch of the accompaniment or standard audio sound pre-recorded on the software (CDs).

[Skip]: Sets the song to be played ([OFF]) or not ([ON]) during playback a series of songs in an album.

[Guide]:

Turns the SmartKey function on ([ON]) or off ([OFF]). When [ON] is selected, you can set the on/off setting of the SmartKey function respectively for each part ([L] and [R]). For details, see "Selecting the Part to Be Guided" on page 35.

Note: The [Guide] option is automatically set to [ON] when SmartKey song is played.

1 Select the desired song. (→ pg. 12 "Selecting a Song" in "Quick Guide")

2 Tap on Next → repeatedly in the [Song] screen so that the following screen appears.

Song-Option screen

3 Tap on the title of the desired option.

The selected title is highlighted.

4 Press ↑ ↓ to select/adjust the desired option/level, and then press ○ (select button).

34

SmartKey™ Playback

The SmartKey feature of your Disklavier is a unique application of Yamaha's patented "Guide" system technology and compatible with SmartKey software. With the SmartKey software, non-players can play simple melodies by following the guidance of the prompt key without a written music book.

Note: SmartKey software may not be available in some countries.

Note: SmartKey is a trademark of Yamaha Corporation or Yamaha Corporation of America.

smartkeY™

1 Select the desired song with 🎹 icon. (→ pg. 12 "Selecting a Song" in "Quick Guide")

2 Press ▶.

Key prompt
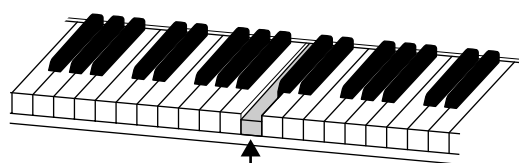
Key prompt (The key slightly moves downward)

Key notation

As a reference, "C3" is middle "C", which means "C4" is an octave above middle "C" and so on.

Middle "C"
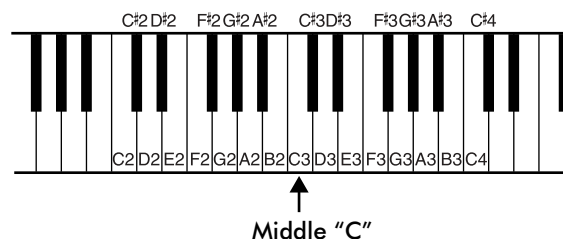
3 Follow and play the prompt key.

The Disklavier plays a simple melody.

4 Continue to play the prompt keys one by one until the end of the song.

Notice that the Disklavier patiently waits for you to play the right key before proceeding to the next key. Also, notice that if you happen to miss the prompt key, it will gently remind you the right key every few seconds until you play the right key.

Selecting the Part to Be Guided

You can activate the SmartKey function only for your desired part ([L] or [R]). The [Guide] option should be turned on in advance. (→ pg. 34)

1 Show the [Part] screen. (→ pg. 24 "Playing Back Only the Desired Piano Part")

Left-hand part

Right-hand part

[Part] screen

2 Tap on the desired part to change its setting (guide, normal play, or mute).

Each time you tap on the part, its setting changes as follows showing the status with the color of the part icon:

 → →

Guide (orange) → Normal play (green) → Mute (white)
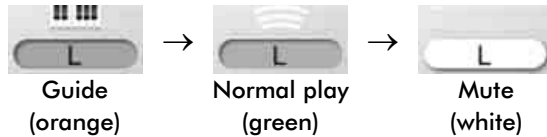
Adding Disklavier Accompaniment to Commercial CD Songs (PianoSmart)

You can add a Disklavier piano performance provided on SmartPiano software floppy disks to the playback of songs on commercial CDs. Furthermore, once you playback a SmartPiano song to the end, the paired song on the CD is automatically copied to the [CD Library]. This feature eliminates the trouble of changing CDs and enables quick playback later.

1 Select the desired SmartPiano song (a song with). (→ pg. 14 in "Quick Guide")

When you select a SmartPiano song for the first time, [Please insert the CD.] screen appears.

> **Tip:** It is convenient that you copy the SmartPiano software to the [User Library] in advance. (→ pg. 53 "Making Copies of the Entire Contents in a Medium or Song Library")

2 Load a CD paired with the SmartPiano software, if necessary. (→ pg. 20 "Loading a CD").

> **Note:** When you perform PianoSoft playback for the first time, it takes 15 seconds to synchronize the SmartPiano song and the CD with the [Registering] appearing on the screen.

3 Wait until the [Registering] disappear, and then press to start PianoSmart playback.

> **Note:** If [Different CD!] screen appears in step **2**, confirm that the CD paired with the selected SmartPiano song is loaded, and then tap on <u>OK</u> .

Video Synchronized Playback

1 Perform the video synchronized recording in advance. (→ pg. 43)

> **Note:** Be sure to rewind the video cassette to locate the beginning of the recording.

2 Make sure that the video synchronization is on. (→ pg. 43 "Setting Up the Camcorder and the Disklavier")

3 Turn down the volume completely on the camcorder.

> **Note:** Although noises (synchronizing signal) are heard from the camcorder's speaker when the volume is not turned down completely, this is not a malfunction.

4 Start playback on the camcorder.

The Disklavier automatically selects the song paired with the video, and then starts playback as well.

Note: You cannot change the playback tempo during video synchronized playback.
Note: When the song paired with the video is stored in [User Library] (songs recorded with Video Synchronized Recording will automatically be stored here) or [PianoSoft Library], the song is automatically selected and starts playback. However, it is required to select the desired song after step **2** when the song is stored in the removable medium.

English

Piano Playing Features

Playing the Disklavier along with the Internal Metronome

The beats of the metronome help you play the Disklavier with a steady tempo. The tempo, the meter (beat), and the volume of the click can be adjusted.

Note: The [Tempo] value indicates the number of beats in a minute, and one beat represents a quarter note. When you play a song written in different measure unit, convert the unit to quarter note (e.g. When playing a song in 3/2, set [Beat] to 6/4).

1 Tap on ⬛ Metro-nome in the [Main] screen.
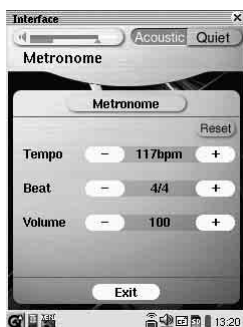
2 Tap on ⬛ Metronome to start the metronome.

The color of ⬛ Metronome changes to blue.
To stop the metronome, tap on ⬛ Metronome.

3 Tap on ⬛ − / ⬛ + to adjust the value of the desired option.

Tip: Tap on Reset to resume the default tempo. In such a case, note that the operation changes only the [Tempo] value.

4 Tap on ⬛ Exit to complete the operation.

Playing the Disklavier Accompanied by the Additional Voice(s) (Performance Mode)

This function lets you play the piano sound of the Disklavier accompanied by other voices produced by the internal tone generator. A maximum of two voices sound in unison with the right-hand part that you play and one voice does with the left-hand part. You can also mute the piano sound to your preference.

1 Tap on ⬛ Perfor-mance in the [Main] screen.

Tap to change the split point (see step **3**.)

Voice name
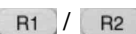
Turns on/off the left-hand/right-hand1/right-hand2 part accompanying voice

2 Tap on ⬛ L / ⬛ R1 / ⬛ R2 to turn on/off the accompanying voice for the respective part.

Each time you tap on ⬛ L / ⬛ R1 / ⬛ R2, the respective voice turns on (blue) and off (yellow) alternately.

3 Tap on [SplitPoint], and then press 🔵 🔵 to select a note as the split point (within the range from [A-1] to [C7]) if necessary.

The selected note and notes lower than that note are assigned to the left-hand part, and the notes higher than that are assigned to the right-hand part.

> **Note:** The split point can be set only when both L and R1 / R2 are turned on (blue).

4 Tap on the voice name of the desired part.

5 Tap on the desired voice.

6 Tap on [Volume] (−)/(+) to adjust the volume of the selected voice.

7 Tap on Exit to complete the operation.

To mute the piano sound, tap on Piano . Piano turns to red. Each time you tap on Piano , the piano sound turns on and off alternately.

Adding Expressive Effect to Your Play

In Quiet or Headphone mode, when a voice contained in [AEM Brass], [AEM Sax], or [AEM Section] Instrument Group is selected, depressing the pedal adds articulations specific to the wood/brass wind. Three types of articulation are assigned to the respective pedals.

Soft pedal:
Assigned for adding Head (blow-up) articulation to the manner of beginning a note.

Sostenuto pedal:
Assigned for adding Joint articulation to the interval of two notes.

Damper pedal:
Assigned for adding Tail (fall-down) articulation to the manner of ending a note.

Soft pedal   Sostenuto pedal   Damper pedal
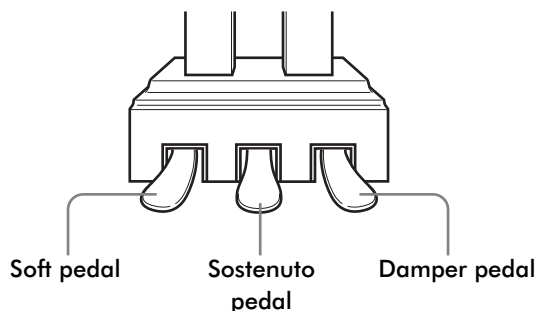
1 Select the desired voice contained in [AEM Brass], [AEM Sax], or [AEM Section] Instrument Group. (→ pg. 67 "Piano Voice List" and pg. 19 "Selecting the Voice in Quiet/ Headphone Mode" in "Quick Guide")

2 Operate the key and the desired pedal.

The key and pedal operation varies depending on the type of the articulation.

For Head (blow-up) articulation

1 Press and hold the soft pedal, and then press the desired key.

The blow-up speed is controlled in accordance with the angle of the pedal that is pressed.

For Joint articulation

1 Press the desired key to be jointed with the next key.

2 Depress and hold the sostenuto pedal, and then press another key in a certain interval.
The first note leads to the second one by added glissando between them.

> **Tip:** This articulation is the most effective when the interval of the two notes is an octave.

> **Note:** When the interval of the jointed notes is narrower or wider than an octave, Joint articulation may not effect those notes.

For Tail (fall-down) articulation

1 Press the desired key.

2 While the key is pressed, depress the damper pedal, and then release the key.

3 Release the damper pedal to mute the note.
The note sustains for a while with its pitch falling down to the lower octave's note before muting the note completely.

> **Tip:** When you immediately release the damper pedal, short Tail articulation effects on that note. When you slowly release the damper pedal, long Tail articulation effects on that note.

> **Note:** The Disklavier stops sustaining the note, and then adds Tail articulation at the release of the damper pedal (not at the release of the key).

Adding Chords to a Melody Line (Harmony Mode)

In Quiet or Headphone mode, the Disklavier can add a chord suitable for the melody line played on the keys higher than the split point in accordance with the notes played (but without sound) on the keys* lower than the split point.

* The Disklavier creates a chord based on the notes of up to three keys.

> **Note:** In this mode, the keys lower than the split point are muted.

Setting up Harmony Mode

You can select the desired split point and the balance between the chord's volume and the melody line's volume.

1 Tap on Setup in the [Main] screen, and then on Harmony .
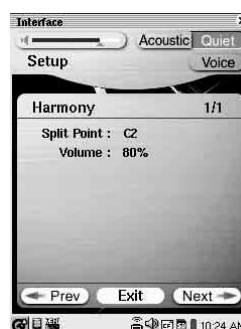
2 Tap on [Split Point]/[Volume], and then press to select/adjust the selected option.

3 Tap on Exit to complete the operation.

Playing the Disklavier in Harmony Mode

1 Activate Quiet or Headphone Mode. (→ pg. 16 "Basic Piano Playing" in "Quick Guide")

2 Tap on Voice in the Information Area.

3 Tap on Harmony to activate Harmony Mode.

Each time you tap on Harmony, Harmony Mode is activated or inactivated alternately.

4 Tap on Exit to clear the [Voice] screen.

5 Play the desired chord on the keys lower than the split point and play the melody line on the keys higher than the split point.

Applying Reverb Effects to the Digital Piano

A piano sounds differently depending on the size of the room in which it is played. The reverberation is the major reason for this difference. Controlling the reverberation simulates the acoustics of the digital piano played in a concert hall. This effect can be also applied to the microphone input.

1 Tap on Setup in the [Main] screen, and then on Reverb.

Selects the desired reverb type.

Adjusts the reverb level of the digital piano sound.

Adjusts the reverb level of the microphone.
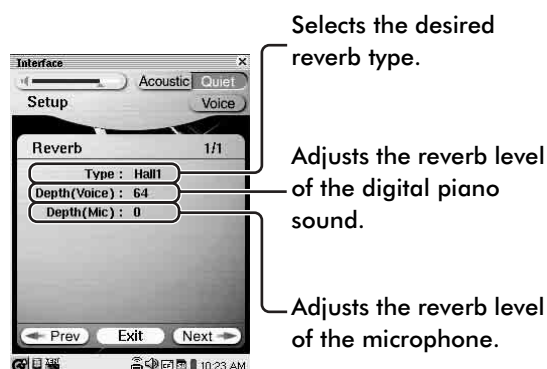
2 Tap on [Type], on the desired reverb type, and then on Close.

3 Tap on [Depth (Voice)]/[Depth (Mic)], and then press to adjust the reverb level.

4 Tap on Exit to complete the operation.

English

Recording

Recording a New Song

A song that you play on the Disklavier can be recorded in the [User Library] and the recorded song can be easily played back. Furthermore, you can select and exclusively record the desired part.

1 Tap on ⚫ REC in the [Main] screen.

A new song will be created automatically.

2 Tap on ⬛ 1 New Song ⬛.
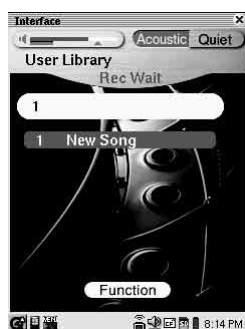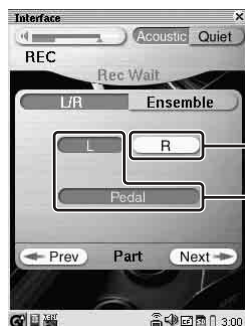
The white part won't be recorded.

The red part will be recorded.

3 Tap on the desired part (⬛ L ⬛, ⬛ R ⬛, or ⬛ Pedal ⬛) to change its setting (record or not).

Each time you tap on the part, its setting changes alternately.

When you record both left- and right-hand part, go to step **4**.

When you record either left- or right-hand part, go to step **5**.

4 Tap on [Split Point], and then press 🎵 🎵 to select the desired note as the split point.

The selected note and notes lower than that note are assigned to the left-hand part, and the notes higher than that are assigned to the right-hand part.

5 Press ▶ to start, and then immediately pause recording.

Note: When the video synchronization is on (→ pg. 43 "Video Synchronized Recording"), recording does not pause in this step.

6 Confirm that [Recording] appears in the Information area, and then start playing the Disklavier.

The Disklavier starts recording.

7 Press ⬛ to stop recording.

To play back the recorded song, press ▶.

Quick Recording

With the simple operation of the buttons on the Media Center, you can quickly start recording. The new song will be recorded as the last song of the last album in the [User Library] by following the procedure below.

1 Press ⊙REC on the Media Center.

⊙REC lights up red and ⊙User flashes green.

To cancel recording, press ⊙REC again.

2 Press ⊙User to start recording.

⊙User stops flashing green, and then remains lit.

3 Play the Disklavier.

4 Press ⊙REC or ⊙User to stop recording.

⊙REC and ⊙User turn off.

Titling a Song at the Start of Recording

During the recording procedure, you can title a new song before you start recording. You can also title the recorded song later on. (→ pg. 31 "Checking and Modifying the Song Information")

1 Perform the procedures from step **1** thru step **2** of "Recording a New Song". (→ pg. 41)
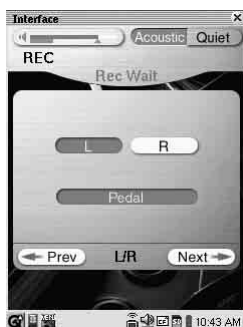
2 Tap on [Next→].

Song title area

3 Tap on the song title area, name the song (→ pg. 33 "Entering Characters"), and then tap on [OK].

To cancel this operation, tap on [Cancel].

Recording the Left- and Right-Hand Parts Separately (Overwrite Recording)

You can overwrite the desired part to a previous recording. For example, if you record the left-hand part of a song, and then record a right-hand part over the previously recorded song, both recording will be combined.

1 Record the desired part of a song in advance. (→ pg. 41 "Recording a New Song")

2 Select the song to be overwritten, if necessary. (→ pg. 12 "Selecting a Song" in "Quick Guide")

Tip: When you start overwriting in succession to the previous recording, skip this step and go to step **3**.

English

3 Tap on `Func`, and then on `Re-REC`.

4 Tap on the desired part (`L`, `R`, or `Pedal`) to select its setting (to be recorded/overwritten).

Each time you tap on the part, its setting changes as follows showing the status with the color of the part icon:
Not record (white)/Not overwrite (green) ↔ Record/overwrite (red)

> **Tip:** You can also overwrite the previously recorded part along with the blank part.

5 Press ▶ to start, and then immediately pause recording.

6 Confirm that [Recording] appears in the information area, and then start playing the Disklavier.

The Disklavier starts recording.

7 Press ■ to stop recording, and then tap on `Save` (to overwrite) or `NEW` (to record as a new song) to complete the recording.

To cancel the recording, tap on `Cancel`.

Video Synchronized Recording

By recording a song played on the Disklavier synchronized with the video recording, later on, you can enjoy piano playback with the video. (→ pg. 36 "Video Synchronized Playback") First set up the camcorder and the Disklavier, and then start recording by following the procedures below.

Setting Up the Camcorder and the Disklavier

1 Hook up a camcorder to the I/O Center.
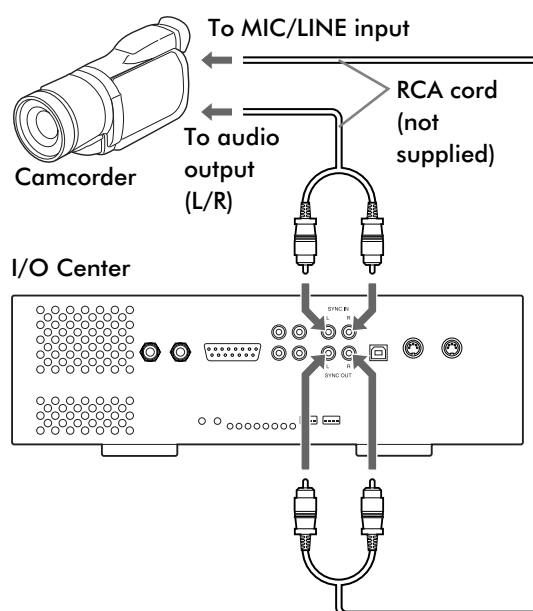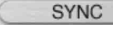
2 Tap on 💿 Setup in the [Main] screen, and then `SYNC`.
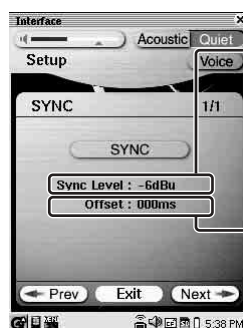
For normal use, the adjustment of this option is not required.

Adjusts the length of the offset time that leads the actual playback of entire recording.

3 Tap on ⬚ SYNC ⬚ to turn the video synchronization on.

Each time you tap on ⬚ SYNC ⬚, the video synchronization turns on and off alternately.

4 Tap on the desired option ([Sync Level] or [Offset]), and then press ◀ ▶ to adjust its value.

To cancel the adjustment, press ⬚.

5 Press ◯ (select button) to set the value.

> **Tip:** The shortcut button on the [Song] screen is also available. Tap on Sync On to turn on video synchronization, and Sync Off to turn it off.

Each time you tap on this button, Sync On and Sync Off alternates.

> **Note:** Video synchronization does not function under the following conditions:
>
> • While songs on SmartPianoSoft, PianoSoftPlusAudio, SmartKey, and audio CD are played back.
>
> • While Vocal Harmony mode is activated.
>
> In such cases, the icon Sync Off is shown in gray.

Starting Video Synchronized Recording

1 Press ⬚ repeatedly until the [Main] screen appears, and then tap on ⬚ REC ⬚ in the [Main] screen.

2 Start recording on the camcorder.

3 Confirm that [Rec Wait] appears in the information area, and then press ▶ to start recording.

4 Wait for approximately ten seconds, and then start playing the Disklavier.

> **Note:** This step is necessary for synchronization of the song and the video playback, and should not be omitted.

5 After playing the Disklavier, press ⬛ to stop recording.

6 Stop recording on the camcorder.

CD Synchronized Recording

You can record a Disklavier piano performance in the [User Library] along with the playback of songs on commercial CDs. Once you record a song to the end with this feature, the played back song on the CD is automatically copied to the [CD Library]. When you play back the performance recorded with this feature, follow the procedure in "Adding Disklavier Accompaniment to Commercial CD Songs (PianoSmart)" on page 36.

1 Load the desired CD, if necessary. (→ pg. 20 "Loading a CD")

2 Select the desired song. (→ pg. 12 "Selecting a Song" in "Quick Guide")

3 Tap on `Func` in the [Song] screen, and then on `SPS REC`.

   Tip: Tap on the desired part to change its setting (record or not) if necessary. (→ pg. 41)

4 Start playing the Disklavier.

5 Press ◼ to stop recording.

Recording Ensemble Parts

In addition to making piano-only recordings, you can record a part in a voice different from the piano as an ensemble part. (The piano can also be selected as an ensemble voice.) You can also overwrite an existing song with an ensemble part.

Ensemble Part Recording and Track Structure

Piano and ensemble parts played on the Disklavier are recorded as MIDI data. MIDI data consist of 16 tracks, with a single voice assigned to each track (There is a resemblance to a score with 16 staves). Generally the left-hand part of the piano (including half-pedal data) is assigned to Track 1, the right-hand part (including half-pedal data) to Track 2, and the ensemble and rhythm parts to the remaining tracks.

1 Put the Disklavier in Quiet Mode or Headphone Mode. (→ pg. 16 "Basic Piano Playing" in "Quick Guide")

2 Tap on `REC` in the [Main] screen.

3 Tap on `1 New Song`.

4 Tap on `Ensemble`.
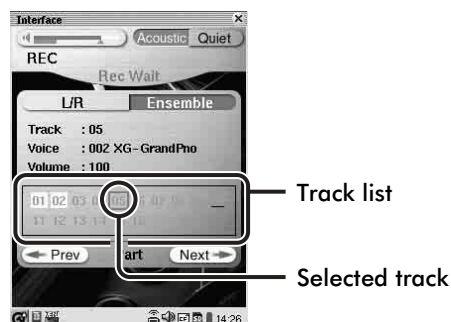
Each track number in the track list is colored depending on its status.

Black:

Recorded track

Gray:

Blank track

With white background:

Track assigned to a piano part

Underlined:

Track assigned to a rhythm part

5 Tap on the track number to be overwritten in the track list.

> **Tip:** After tapping on a track number, you can select tracks by pressing 🔲 🔲.

6 Tap on [Voice], and then the desired voice.

Appears when there are more voices not shown in the window. In such a case, tap on either end of this bar to show the hidden voices.

> **Tip:** Checking in advance the desired voice number in "Ensemble Part Playback Voice List" (→ pg. 68) helps you quickly select the voice.

Tap on ⟨ Number ⟩, and the following screen appears.

Enter the voice number with the keyboard on the pocket controller, and then tap on ⟨ OK ⟩.

7 Tap on ⟨ Close ⟩.

8 Tap on [Volume], and then press 🔲 🔲 to adjust the volume of the ensemble part.

9 Press ⟨ ▶ ⟩, and then play the Disklavier along with the playback of the song.

Recording starts automatically.

10 After playing the Disklavier, press ⟨ ■ ⟩ to stop recording.

11 Tap on ⟨ Save ⟩ (to overwrite) or ⟨ NEW ⟩ (to record as a new song) to complete the recording.

To cancel recording, tap on ⟨ Cancel ⟩.

To change a voice and its volume without overwriting with a new performance, perform the above procedures from steps **1** thru **11**, omitting steps **9** and **10**.

Overdubbing an Existing Part

You can overdub* a track (part) in an existing song.

* The existing and new performances will be mixed when you play back an overdubbed song.

1 Select a song to be overdubbed. (→ pg. 12 "Selecting a Song" in "Quick Guide")

2 Tap on `Func`, and then `Re-REC`.

3 Select a track (part) to be overdubbed.

Overdubbing a Piano Part

Tap on the desired part to turn the color from green to red. (→ pg. 42 "Recording the Left- and Right-Hand Parts Separately (Overwrite Recording)")

Overdubbing an Ensemble Part

Tap on `Ensemble`, and then the desired track (black number). (→ pg. 45 "Recording Ensemble Parts")

4 Tap on `Next ➡` twice.

5 Tap on [Overdub], and then press 🔼🔽 to select [ON].

6 Press ▶, and then play the Disklavier along with the playback of the song.

Recording starts automatically.

7 After playing the Disklavier, press ◼ to stop recording.

8 Tap on `Save` (to overwrite) or `NEW` (to record as a new song) to complete the recording.

To cancel recording, tap on `Cancel`.

> **Tip:** To overwrite (not overdub) a track, select [OFF] in step **5**.

Recording Songs Based on Measures and Beats (Metronome Mode Recording)

There are two recording modes available for the Disklavier: Time Mode (recording mode based on the elapsed playing time) and Metronome Mode. Once you record songs in Metronome Mode, you can start overwriting recordings synchronized with the beats of the internal metronome over the recorded songs. Furthermore, you can change the tempo of the recorded songs afterward by editing its original data.

Making a New Recording

1 Set up the metronome. (→ steps **1** and **3** of "Playing the Disklavier along with the Internal Metronome" on pg. 37)

2 Tap on New REC .

3 Press ▶ .

Measure-number counter starts.

4 Play the Disklavier along with the metronome.

Recording starts automatically.

5 After playing the Disklavier, press ■ to stop recording.

Overwriting a Part on an Existing Song

1 Select the song to be overwritten (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on Func .

2 Tap on Re-REC .

3 Set up the overwritten part (track) and its voice. (→ pg. 42 "Recording the Left- and Right-Hand Parts Separately (Overwrite Recording)", → pg. 45 "Recording Ensemble Parts")

4 Press ▶ .

5 Play the Disklavier along with the metronome.

Recording starts automatically.

6 After playing the Disklavier, press ■ to stop recording.

7 Tap on Save (to overwrite) or NEW (to record as a new song) to complete the recording.

To cancel recording, tap on Cancel .

Quantize Function

This function is used to compensate for slight inaccuracies in the playing data (the length of a note and the timing of the key stroke). A measure is equally divided into a certain number of sections (4, 6, 8, 12, and 16 sections) and the key strokes are fit exactly into the sections. In the Disklavier, each section indicates a quarter note.

1 Perform steps **1** and **2** of "Recording Songs Based on Measures and Beats (Metronome Mode Recording)". (→ pg. 48)

2 Tap on the desired song in the list that appears.

3 Tap on Next ➡ repeatedly until the following screen appears.

4 Tap on [Quantize], and then press to select the desired option ([1/4], [1/6], [1/8], [1/12], [1/16]).

The lower number of the fraction indicates the number of sections a measure is evenly divided into.

5 Press ▶.

The metronome starts clicking.

Measure-number counter starts.

6 Play the Disklavier along with the metronome.

Recording starts automatically.

7 After playing the Disklavier, press ■ to stop recording.

To cancel Quantize function, select [OFF] in step **4**.

Changing the Default Tempo

You can change the default tempo of a recorded song afterward. When you change the tempo, note that the current tempo is overwritten by the new one.

1 Select the song to be overwritten (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on Func.

2 Tap on Re-REC.

3 Set up the overwritten part (track) and its voice. (→ pg. 42 "Recording the Left- and Right-Hand Parts Separately (Overwrite Recording)", → pg. 45 "Recording Ensemble Parts")

4 Tap on Next→.

EX.: A song recorded in Time Mode

EX.: A song recorded in Metronome Mode

5 Tap on − / + of [Tempo] to adjust the tempo.
To resume the original tempo, tap on Reset.

> **Note:** You cannot change the [Beat] setting of a song recorded in Metronome Mode.

6 Press ▶.
Time Mode:
Playback starts.

Metronome Mode:
Metronome starts.

7 Play the Disklavier along with the metronome.
Recording starts automatically.

8 After playing the Disklavier, press ■ to stop recording.

9 Tap on Save (to overwrite) or NEW (to record as a new song) to complete the recording.
To cancel recording, tap on Cancel.

To change a tempo without overwriting with a new performance, perform the above procedures from step **1** thru **9**, omitting steps **3**,**6** and **7**.

English

5 Creating a Song Library

The following functions listed in the Function Menu are useful for organizing the contents in the song libraries ([PianoSoft Library], [CD Library], and [User Library]) as well as [Play Lists]. (→ pg. 25 "Utilizing the Play Lists")

> **Note:** Be sure to read "album" as "list" during operation for the [Play Lists].

> **Ex.:** Function Menu for the Album List of [User Library]
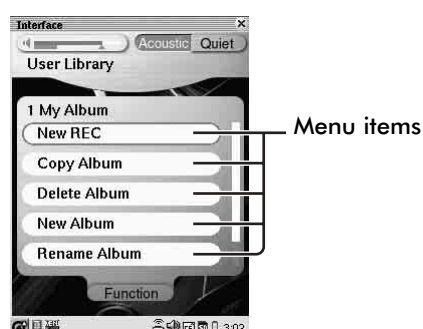
Menu items

> **Note:** The menu items differ depending on the screen.

To clear the Function Menu screen, tap on **Func** or **Function**, or press ⤺.

Creating an Album in the Library

This function is available for [PianoSoft Library], [User Library], and [Play Lists].

1 Select the desired source (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on **Function**.

2 Tap on **New Album**.

Tap to cancel album creation.

To name the new album, see step **3** in "Renaming an Album" on page 52.

3 Tap on **OK**.

4 Tap on **OK** after the completion message appears.

Renaming an Album

This function is available for all song libraries and [Play Lists].

1 Select the desired album (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on [Function].

2 Tap on (Rename Album).

Tap to cancel renaming in step **3**.

3 Tap on [Title], rename the album (→ pg. 33 "Entering Characters"), and then tap on [OK].

4 Tap on [OK].

5 Tap on [OK] after the completion message appears.

Making Copies of Songs or Albums

This function is available except for [CD Library] and [Play Lists].

1 Select the desired song or album (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on [Func] or [Function].

2 Tap on (Copy Song) or (Copy Album).

Ex.: Copy Song

Tap to cancel the operation in step **3**.

3 Copy the selected song or album.

Copying a Song:

1 Tap on [Source], and then on the destination source in the list that appears if necessary.
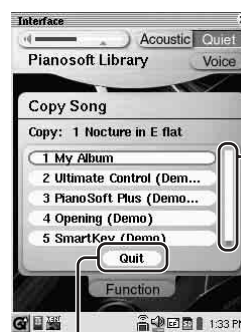
Appears when there are more songs or albums not shown in the window. In such a case, tap on either end of this bar to show the hidden songs.

Tap to cancel the selection.

2 Tap on [Album], tap on the destination album in the list that appears if necessary, and then go to step **4**.

English

Copying an Album:

— only when [FD] is selected as the source

Tap on [Source], and then on the destination source in the list that appears, and then go to step **4**.

E-SEQ (Piano1) format conversion

When a song is saved in this format, the song can be played back on all Disklaviers.

To convert the format of the album stored in a floppy disk, tap on the check box for [Convert to E-SEQ (Piano1)].

Copying an Album:

— when a source other than [FD] is selected

Tap on [Album].

Destination album list screen

Tap on the desired album, and then go to step **4**.

4 Tap on [OK].

5 Tap on [OK] after the completion message appears.

Making Copies of the Entire Contents in a Medium or Song Library

This function is available except for [CD Library] and [Play Lists].

1 Select the desired source (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on [Function].

2 Tap on (Copy All).

Tap to cancel making a copy.

3 Tap on [Source], and then on the destination source in the list that appears if necessary.

4 Tap on [OK].

Deleting Songs or Albums

This function is available for all song libraries and [Play Lists].

1 Select the desired song or album (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on `Func` or `Function`.

2 Tap on `Delete Song` or `Delete Album`.

To cancel deletion, tap on `Cancel`.

3 Tap on `OK`.

4 Tap on `OK` after the completion message appears.

Rearranging the Order of Songs/Albums

This function is available for all song libraries and [Play Lists].

1 Select the desired song or album (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on `Func` or `Function`.

2 Tap on `Sort Song` or `Sort Album`.

Ex.: Sort Song List

Tap to cancel rearrangement.
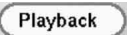
3 Tap on ▲/▼ repeatedly so that the selected song or album moves to the desired position.

4 Tap on `OK`.

5 Tap on `OK` after the completion message appears.

Other Settings

Skipping the Blank Part at the Beginning of a Song

When there is a blank part created at the beginning of the recorded song, turning on this function automatically skips the unwanted part and starts playback from the actual beginning of the song.

1 Tap on [Setup] in the [Main] screen, and then on (Playback).

2 Tap on [Skip Space],and then press ▲ ▼ to select [ON].

3 Tap on [Exit] to complete the operation.

To inactivate this function, select [OFF] in step **2**.

Inactivating the Key Movement During Playback

During playback of a song, keys normally move in accordance with the playback of the respective note's key. In Quiet or Headphone mode, you can select an option of stopping this key movement. This enables you, for example, to play along with the song being played back, to add your own improvisation, or to create a four-hand duet.

1 Tap on [Setup] in the [Main] screen, and then on (Playback).

2 Tap on [Quiet Key], and then press ▲ ▼ to select [ON].

3 Tap on [Exit] to complete the operation.

To inactivate this function, select [OFF] in step **2**.

Tip: The shortcut button on the [Song] screen is also available. Tap on [Key On] to activate the function above, and on [Key Off] to inactivate it.

Each time you tap on this button, [Key On] and [Key Off] alternates.

Using Timer Play

You can start or stop playback of a song automatically at specific times. A maximum of 99 timer programs can be set.

Note: Be sure to set the date, time, and time zone in advance. (→ pg. 16 "Setting up the Current Date and Time")

1 Tap on [Timer Playback] in the [Main] screen.

Timer list screen

2 Tap on the desired row in the timer list.

Tap to delete the current timer program.

Tap to close the list.
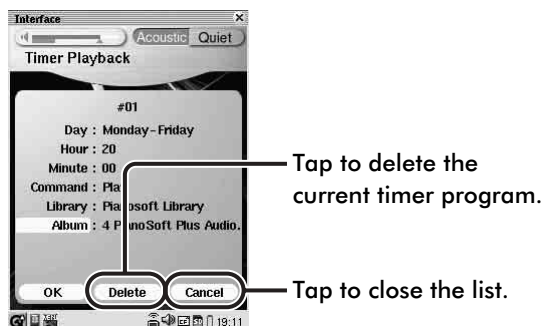
3 Tap on [Day], and then press to select the desired day.

The following day settings are available: All Days, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, Monday-Friday, Monday-Saturday.

4 Tap on [Hour], and then press to select the desired hour.

5 Tap on [Minute], and then press to select the desired minute.

6 Tap on [Command], and then [Play] or [Stop].

7 Tap on [Library], and then the desired library.

Tip: If you want to select the current album, tap on Cancel. [- - - - -] appears in the [Album] column in the timer list screen.

8 Tap on [Album], and then the desired album.

9 Tap on OK.

Tip: The following indications in the [Album] column show the type of song library.

[PS-]: PianoSoft Library

[UR-]: User Library

[CD-]: CD Library

[PL-]: Play list

If you do not specify a library in step **7**, the current album is selected for the timer program and [- - - - -] appears in the [Album] column.

10 Tap on Exit to complete the setting.

To delete all timer program settings, tap on Delete All on the timer list screen, and then OK in the confirmation screen.

Tuning the Tone Generator (MasterTune)

The digital piano has already been tuned to match the acoustic piano (A3 = 440 Hz). However, you can re-tune the digital piano in accordance with the pitch of the acoustic piano by following the procedure below.

1 Tap on [Setup] in the [Main] screen, and then on [M.Tune].

2 Tap on [–]/[+] to tune the Disklavier.
To cancel tuning, tap on [Reset].

3 Tap on [Exit] to complete the operation.

Applying an Effect to Your Voice (Vocal Harmony)

By connecting a microphone to the Disklavier and singing along with the piano, you can enjoy a variety of effects such as adding harmony to your voice and changing the pitch of your voice. You may feel as if you were singing in a bar lounge. It's great fun to use this function.

1 Hook up a microphone (not supplied) to the Media Center, and then turn on the microphone.

Microphone (not supplied)

Media Center

[MIC/LINE] switch   [INPUT VOLUME] knob
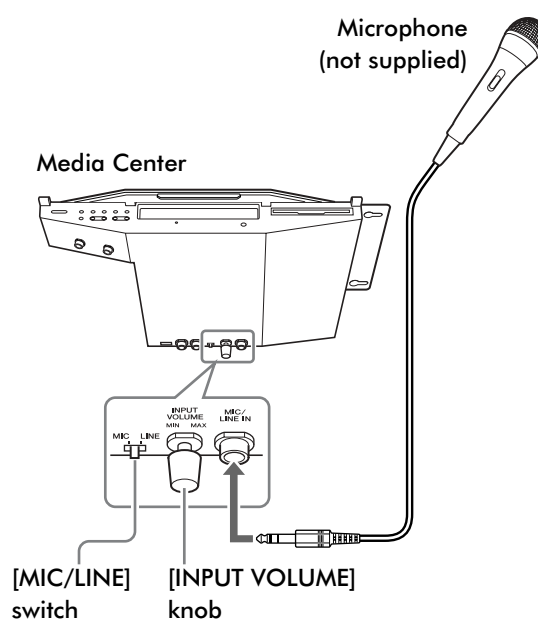
2 Set the [MIC/LINE] switch to the [MIC] position.

3 Turn the [INPUT VOLUME] knob to adjust the input volume of the microphone.

4 Adjust the [MIC] volume on PRC-100. (→ pg. 25)

5 Apply the desired reverb effect.
(→ pg. 40)

6 Tap on ⬛ Vocal Harmony in the [Main] screen.

[Vocal Harmony]
screen

Vocal harmony type

7 Tap on the desired vocal harmony type.

For the entire list, see "Vocal Harmony Type List". (→ pg. 76)

8 Tap on Next ➡.
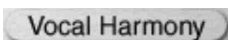
The [Balance] setting screen appears.
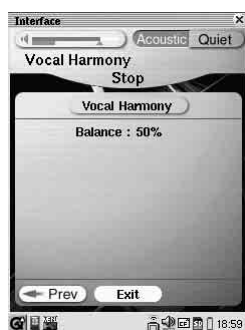
9 Tap on [Balance], and then press ◖ ◗ to adjust the balance between your voice and the effect.

Tip: The balance can be adjusted from 0 to 100%.

10 Tap on Vocal Harmony to activate Vocal Harmony mode.

Each time you tap on Vocal Harmony, the mode is activated (the color turns to blue) or inactivated.

11 Tap on Exit to clear the [Vocal Harmony] screen.

Tip: The shortcut button on the [Song] screen is also available. Tap on VH On to activate the mode above, and on VH Off to inactivate it.

Each time you tap on this button, VH On and VH Off switches.

Note: The following features are not available while Vocal Harmony Mode is activated.

• Video synchronized playback
• Video synchronized recording

Note: Vocal Harmony Mode does not function while playing back songs in SmartPianoSoft, PianoSoftPlusAudio, and audio CDs or receiving analog MIDI data.

English

Preparing for Use of Foot Controls/Switches

The optional foot controller (FC7) or the foot control switch (FC4, FC5) can be connected to the Disklavier and the desired function is assigned to them. At the maximum of two controllers/switches can be connected simultaneously.

Assignable functions are as follows:

[Play/Stop]:

Controls starting/stopping of playback. Tempo control is also available (only in the FC7).

[Main Volume]:

Controls the overall volume.

[Voice Volume]:

Controls the volume of the piano voice in Quiet Mode and Headphone Mode.

[Pitch Bend]:

Controls the pitch of the piano voice.

Setting Up the Disklavier for Foot Controls/Switches

1 Connect a foot control/switch to the FOOT CNTRL1/2 jack.

Bottom of the Media Center

Foot control/switch (not supplied)
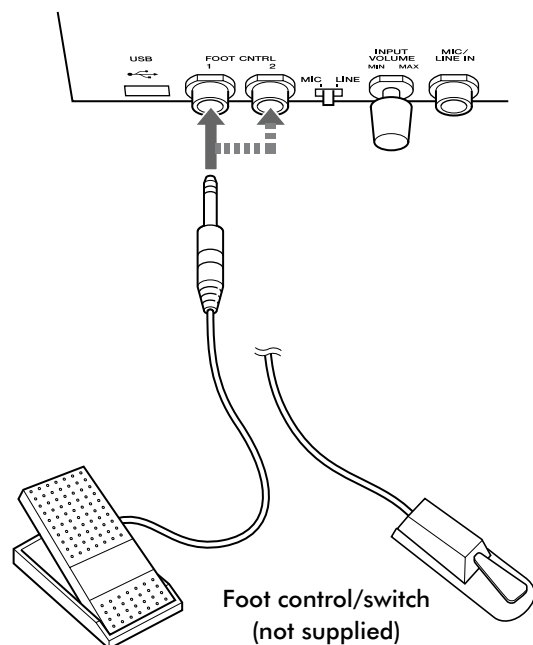
2 Tap on [Setup] in the [Main] screen, and then [Foot Cntrl].

3 Tap on [Function] of the desired foot control/switch, and then the desired function.

Assignable functions

4 Tap on [Close].

Go to step **6** when you select the [Play/Stop] function.

5 Select the detailed setting.

When [Main Volume]/[Voice Volume] is selected

Tap on [Direction], and then press to select the option.

[Up]: Raises the volume when the foot control/switch is pressed and turns down the volume when released.

[Down]: Lowers the volume when the foot control/switch is pressed and turns up the volume when released.

When [Pitch Bend] is selected

Tap on [Direction], and then press 🔼 🔽 to select the option.

[Up]: Raises the key when the foot control/ switch is pressed and resumes the original pitch when released.

[Down]: Lowers the key when the foot control/ switch is pressed and resumes the original pitch when released.

Tap on [Polarity], and then press 🔼 🔽 to select the option.

[+]: Raises/lowers the key when the foot control/switch is pressed and resumes the original pitch when released.

[–]: Raises/lowers the key when the foot control/switch is released and resumes the original pitch when pressed.

6 Tap on ⌐Exit⌐ to complete the setting.

Note: You cannot assign the same function to both [Foot Cntrl 1] and [Foot Cntrl 2].

Operating an Optional Foot Control (FC7)

When [Play/Stop] is selected for [Function]

When the control is pressed down all the way, playback will start in the original tempo. When the control is released completely, playback will pause. Playback tempo varies depending on the angle of the controller within the range of 0 to –50%.

When [Main Volume] or [Voice Volume] is selected for [Function] (with [Direction] set to [Down]*[1])

When the control is pressed down all the way, the sound will be muted. When the control is released completely, the volume turns up all the way. The volume varies depending on the angle of the controller.

*1 When [Up] is selected, the direction of control is reversed.

When [Pitch Bend] is selected for [Function] (with [Polarity] set to [+]*[2])

When the control is pressed down all the way, the song will be keyed up to +2 key. When the control is released completely, the original key will resume. The key varies depending on the angle of the controller.

*2 When [–] is selected, the song will be keyed down.

Operating an Optional Foot Switch (FC4/FC5)

When [Play/Stop] is selected for [Function]

When the switch is pressed, playback will start. When the switch is released, playback will pause.

When [Main Volume] or [Voice Volume] is selected for [Function] (with [Direction] set to [Down]*[3])

When the switch is pressed, the sound will be muted. When the switch is released, the original volume will resume.

*3 When [Up] is selected and the switch is pressed, the volume will increase all the way. (There is no effect for [Voice Volume].)

When [Pitch Bend] is selected for [Function] (with [Polarity] set to [+]*[4])

When the switch is pressed, the song will be keyed up to +2 key. When the switch is released, the original key will resume.

*4 When [–] is selected and the switch is pressed, the song will be keyed down.

Hooking Up AV Equipment

If you connect the Disklavier to an audio system, you can hear the sound played/played back on the Disklavier from the connected audio system, and the sound played back on the connected audio system from the Disklavier.
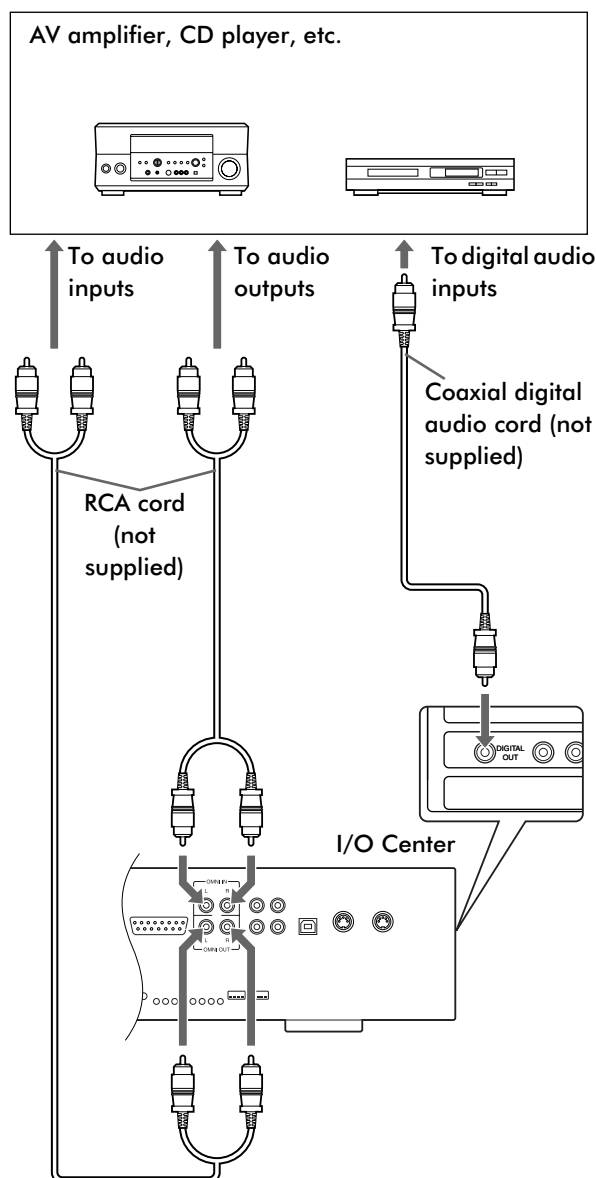
Setting Up the Disklavier for Audio Data Reception/ Transmission

You can select the kind of the incoming/going out audio signals. The following options should be set up in advance.

[OMNI IN]

Selects the appropriate option to match the incoming data input to the [OMNI IN] jacks.

[Audio]: Select this when you play back an audio software on the connected CD player, etc. and reproduce the sound from the Monitor speakers*.

[Analog MIDI-YM]:

Select this when you play back PianoSoft·PlusAudio song.

Note: While this option is selected, you cannot adjust the [ONMI IN Vol] value, and Video Synchronized Playback and Vocal Harmony Mode is not available.

[OFF]: Select this when you cancel the data reception from the [OMNI IN] jacks.

[OMNI OUT]

Selects the desired data to be output from the [OMNI OUT] jacks.

[Output]: Select this when you output the same audio signals as the ones for the Monitor speakers*.

[Output+PianoTG]:

Select this when you output the ensemble part and the digital piano sound. (Note that the digital piano sound is also output in Acoustic mode.)

[PianoTG]: Select this when you output only the digital piano sound.

[OFF]: Select this when you cancel the data transmission from the [OMNI OUT] jacks.

[Digital Out]

Selects the desired data to be output from the [DIGITAL OUT] jack.

[OUTPUT]: Select this when you output the same audio signals as the ones for the Monitor speakers*.

[OMNI OUT]:
Select this when you output the same audio signals as the ones to be output from the [OMNI OUT] jacks.

[SYNC OUT]:
Select this when you output the same audio signals as the ones to be output from the [SYNC OUT] jacks.

[OFF]: Select this when you cancel the data transmission from the [DIGITAL OUT] jack.

* Supplied only with the Mark IV Series.

1 Tap on [Setup] in the [Main] screen, and then on [Audio I/O].

2 Tap on [OMNI IN]/[OMNI OUT]/ [Digital Out], and then press ◀ ▶ to select the desired option.

3 Tap on [Exit] to complete the operation.

Lyric Screen

By hooking up a TV or a monitor display to the I/O Center, lyrics are automatically displayed on the TV or the monitor display during playback a song with lyrics prerecorded.

> **Note:** For purchasing songs with lyrics, consult your Disklavier dealer.

> **Note:** For users in North America, refer to page 27 thru 29 in the "Tablet Controller Operating Manual" as well.

Showing the Lyrics on a TV or a Monitor Display during Playback

1 Hook up a TV or a monitor display to the I/O Center.

TV, monitor display, etc.

To Video input

RCA cord
(not supplied)

I/O Center (Right side)
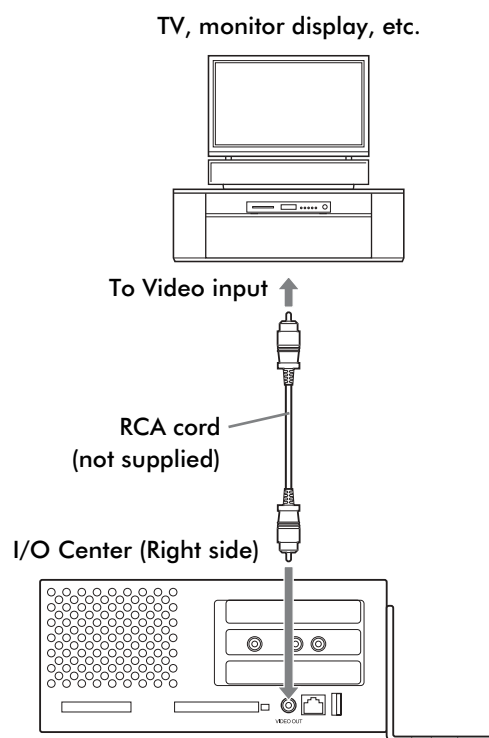
2 Turn on the TV or the monitor display, and then select the input mode that corresponds to the connected TV or monitor display.

3 Start playback of a song with lyrics on the Disklavier.

The lyrics appear with a colorful background picture. A color bar behind the lyrics stretches gradually as the song goes on to indicate the current playback point.

> **Note:** The lyrics are shown only when the song includes the lyric data.

Changing the Background Picture of the Lyric Screen

A number of colorful background pictures are prepared and categorized in the following subjects: Nature, Flowers, Vacation, World, Textures, Holidays, and Romantic.

1 Show the Lyric Screen on the TV or the monitor display to monitor the picture selection. (See above.)

2 Tap on [Setup] in the [Main] screen, and then on [Next ➡].

3 Tap on [Video Out].

4 Tap on [Category], press ◊ ◊ to select the desired option, and then tap on [Close].

5 Tap on [Picture No.], and then press ◊ ◊ to select the desired option.

6 Tap on [Exit] to complete the operation.

Converting MIDI Data to a Standard Form (Strip XP)

Disklavier PRO pianos record highly precise control information (XP events) that becomes part of the MIDI song files. This data is used to achieve accurate playback on the Disklavier PRO, but is not used when the file is played back on general MIDI devices.

When you edit the song with external MIDI products (for example a software sequencer), the relationship between the note data and the XP event as well as the actual performance may not be maintained. There may be cases in which songs edited in this manner cannot be played back normally, depending on the instrument's settings. In such cases, use the Strip XP function to remove the XP event to convert the song to standard MIDI format before using it for playback. Strip XP also makes it possible to reduce the size of MIDI files when desired.

> **Note:** Once the XP event is stripped, the original data cannot be restored. Before converting valuable music data, be sure to backup the original data.

1 Select the song to be converted (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on [Func] or [Function].

2 Tap on [Strip XP].

3 Tap on [OK].

4 Tap on [OK] after the completion message appears.

Making Backups and Restoring the Song Library

You can make a backup copy of the song libraries and play lists, and restore the songs in the Disklavier. In order to protect your valuable music data, Yamaha strongly recommends that you backup your Mark IV hard drive on a regular basis.

Note: Be sure to use a USB HDD formatted in a FAT32 file system in the following procedure. The NTFS file system is not supported for this function.

Making Backups

1 Connect an external USB HDD to the USB port on the Media Center.

2 Tap on [Setup] in the [Main] screen, and then [System].

3 Tap on [Next] in the [System] screen, [Next], and then [Backup Song Data].

4 Tap on [OK].

5 Tap on [Continue].

The Disklavier will start making backups.

6 Tap on [OK] after the completion message appears, and then [Exit].

Restoring the Song Library

1 Perform steps **1** and **2** in "Making Backups" above.

2 Tap on [Next] in the [System] screen, [Next], and then [Restore Song Data].

3 Tap on [OK].

4 Tap on [OK].

5 Tap on [Continue].

The Disklavier will start restoring the song library.

6 Tap on [OK] after the completion message appears, and then [Exit].

English

CHAPTER 6: Other Settings

Restoring the Contents in the Demo Album

If the demo songs are erased by chance, they can be restored by following the procedure below.

1 Tap on `Setup` in the [Main] screen, and then on `System`.

2 Tap on `Recall Demo Album`.

3 Tap on `OK` to start restoring.

4 Tap on `Exit` to complete the operation.

Note: The contents saved in the demo album will be erased.

Making an Install Floppy Disk

In the case of updating the Disklavier, be sure to make a install floppy disk.

1 Tap on `Setup` in the [Main] screen, and then on `System`.

2 Load a formatted floppy disk (2HD) to the drive. (→ pg. 20 "Loading and Ejecting a Floppy Disk")
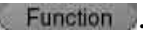
3 Tap on `Make Install FD`.
The Disklavier will start making a backup floppy disk.

4 Tap on `OK`, and then on `Exit` to complete the operation.

Formatting a Floppy Disk

You can format a floppy disk.

1 Tap `FD` on in the [Main] screen (→ pg. 12 "Selecting a Song" in "Quick Guide"), and then tap on `Function`.

2 Tap on `Format FD`.
To cancel erasure, tap on `Cancel`.

3 Tap on `OK`.

4 Tap on `OK` after the completion message appears.

Resetting the Disklavier

If you want to return your Disklavier to its initial factory settings, follow the procedure below.

1 Tap on Setup in the [Main] screen, and then on System.

2 Tap on System Reset.

Tap to cancel resetting.

3 Tap on OK to start resetting.

4 Tap on Exit to complete the operation.

Assigning a Specific Function to the ONE TOUCH Button

You can assign the ONE TOUCH button on the cradle a series of procedures for an often used function. The followings are the available functions.

[REC]: Sets the Disklavier in recording mode. (→ pg. 41)

[Performance]:
Turns on the Performance function. (→ pg. 37)

[Standby]: Turns off the Disklavier. (→ pg. 6 in "Quick Guide")

1 Tap on Setup in the [Main] screen, and then on One Touch.

2 Tap on [Function], press to select the desired option, and then on Close.

3 Tap on Exit to complete the operation.

To inactivate the ONE TOUCH button, select [No Function] in step **2**.

Diagnosing the Disklavier

The piano diagnostics may be required as the occasion demands. In such a case, follow the instructions of your Yamaha dealer and perform the following procedure.

1 Tap on [Service Center] in the [PRC-100 Menu] screen.
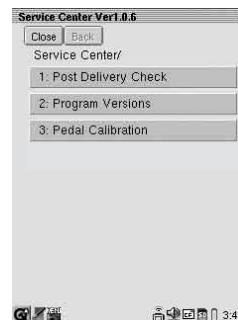
2 Tap on the desired option, and then follow the instructions that appears on the screen.

3 Tap on Exit to return to the [PRC-100 Menu] screen.

Piano Voice List

The following table lists the voices in the internal tone generator only for the piano playing in Quiet or Headphone mode. For details on the voice selection, see "Selecting the Voice in Quiet/Headphone Mode" on page 19 in "Quick Guide".

Instrument Group	Voice Name
Grand Piano	Grand Piano Bright Piano Mellow Piano
E.Piano	Electric Piano Modern Electric Piano DX Electric Piano Galaxy Electric Piano Vintage Electric Piano
Harpsichord	Harpsichord 4' Harpsichord 4'+8' Clavinet
Vibraphone	Vibraphone Marimba Celesta
Church Organ	Church Organ Principal Church Organ Flute Church Organ Full
Jazz Organ	Drawbar Organ Jazz Organ Rotor Organ
Guitar	Nylon Guitar Steel Guitar
Bass	Acoustic Bass Finger Bass Fretless Bass A.Bass and Cymbal
Strings	Strings 1 Strings 2 Synth Strings
Choir	Choir Slow Choir Scat
Pad	New Age Pad Warm Pad

Instrument Group	Voice Name
AEM Brass	AEM-Trumpet 1 AEM-Trumpet 2 AEM-Trombone
AEM Sax	AEM-Alt Sax 1 AEM-Alt Sax 2 (for Solo) AEM-Tenor Sax AEM-Baritone Sax
AEM Section	AEM-Brass Section AEM-Sax Section

Ensemble Part Playback Voice List

The following table lists the voices in the internal tone generators for the ensemble part contained in the PianoSoft·Plus, or for MIDI file playback on the Disklavier or external MIDI device (synthesizer, sequencer, etc.). (→ pg. 78 "Enhancing the Disklavier Features by Hooking Up a MIDI Device")

Group Name	Voice Number	Voice Name
Piano	1	Grand Piano
	2	XG-GrandPno
	3	XG-GrndPnoK
	4	Mellow Piano
	5	XG-MelloGrP
	6	XG-PianoStr
	7	XG-Dream
	8	Bright Piano
	9	XG-BritePno
	10	XG-BritPnoK
	11	XG-E.Grand
	12	XG-ElGrPnoK
	13	XG-Det.CP80
	14	XG-ElGrPno1
	15	XG-ElGrPno2
	16	XG-HnkyTonk
	17	XG-HnkyTnkK
	18	Electric Piano
	19	Modern Elec. Piano
	20	Vintage Elec. Piano
	21	XG-E.Piano1
	22	XG-El.Pno1K
	23	XG-MelloEP1
	24	XG-Chor.EP1
	25	XG-HardEl.P
	26	XG-VX El.P1
	27	XG-60sEl.P

Group Name	Voice Number	Voice Name
Piano	28	DX Electric Piano
	29	Galaxy Elec. Piano
	30	XG-E.Piano2
	31	XG-El.Pno2K
	32	XG-Chor.EP2
	33	XG-DX Hard
	34	XG-DXLegend
	35	XG-DX Phase
	36	XG-DX+Analg
	37	XG-DXKotoEP
	38	XG-VX El.P2
	39	Harpsichord 4'
	40	Harpsichord 4'+8'
	41	XG-Harpsi.
	42	XG-Harpsi.K
	43	XG-Harpsi.2
	44	XG-Harpsi.3
	45	Clavinet
	46	XG-Clavi.
	47	XG-Clavi. K
	48	XG-ClaviWah
	49	XG-PulseClv
	50	XG-PierceCl
Percussion	51	Celesta
	52	XG-Celesta
	53	XG-Glocken
	54	XG-MusicBox
	55	XG-Orgel
	56	Vibraphone
	57	XG-Vibes
	58	XG-VibesK
	59	XG-HardVibe
	60	Marimba

English

Group Name	Voice Number	Voice Name	Group Name	Voice Number	Voice Name
Percussion	61	XG-Marimba	Organ	95	XG-RockOrgn
	62	XG-MarimbaK		96	XG-RotaryOr
	63	XG-SineMrmb		97	XG-SloRotar
	64	XG-Balafon2		98	XG-FstRotar
	65	XG-Log Drum		99	Ch. Organ Principal
	66	XG-Xylophon		100	Ch. Organ Flute
	67	XG-TubulBel		101	Ch. Organ Full
	68	XG-ChrchBel		102	XG-ChrchOrg
	69	XG-Carillon		103	XG-ChurOrg3
	70	XG-Dulcimer		104	XG-ChurOrg2
	71	XG-Dulcimr2		105	XG-NotreDam
	72	XG-Cimbalom		106	XG-OrgFlute
	73	XG-Santur		107	XG-TrmOrgFl
Organ	74	Drawbar Organ		108	XG-ReedOrgn
	75	Jazz Organ		109	XG-Puff Org
	76	XG-DrawOrgn		110	XG-Acordion
	77	XG-DetDrwOr		111	XG-AccordIt
	78	XG-60sDrOr1		112	XG-Harmnica
	79	XG-60sDrOr2		113	XG-Harmo 2
	80	XG-70sDrOr1		114	XG-TangoAcd
	81	XG-DrawOrg2		115	XG-TngoAcd2
	82	XG-60sDrOr3	Guitar	116	Nylon Guitar
	83	XG-EvenBar		117	XG-NylonGtr
	84	XG-16+2"2/3		118	XG-NylonGt2
	85	XG-Organ Ba		119	XG-NylonGt3
	86	XG-70sDrOr2		120	XG-VelGtHrm
	87	XG-CheezOrg		121	XG-Ukulele
	88	XG-DrawOrg3		122	Steel Guitar
	89	XG-PercOrgn		123	XG-SteelGtr
	90	XG-70sPcOr1		124	XG-SteelGt2
	91	XG-DetPrcOr		125	XG-12StrGtr
	92	XG-LiteOrg		126	XG-Nyln&Stl
	93	XG-PercOrg2		127	XG-Stl&Body
	94	Rotor Organ		128	XG-Mandolin

Group Name	Voice Number	Voice Name	Group Name	Voice Number	Voice Name
Guitar	129	XG-Jazz Gtr	Guitar	163	XG-Fretless
	130	XG-MelloGtr		164	XG-Fretles2
	131	XG-JazzAmp		165	XG-Fretles3
	132	XG-CleanGtr		166	XG-Fretles4
	133	XG-ChorusGt		167	XG-SynFretl
	134	XG-Mute.Gtr		168	XG-Smooth
	135	XG-FunkGtr1		169	XG-SlapBas1
	136	XG-MuteStlG		170	XG-ResoSlap
	137	XG-FunkGtr2		171	XG-PunchThm
	138	XG-Jazz Man		172	XG-SlapBas2
	139	XG-Ovrdrive		173	XG-VeloSlap
	140	XG-Gt.Pinch		174	XG-SynBass1
	141	XG-Dist.Gtr		175	XG-SynBa1Dk
	142	XG-FeedbkGt		176	XG-FastResB
	143	XG-FeedbGt2		177	XG-AcidBass
	144	XG-GtrHarmo		178	XG-Clv Bass
	145	XG-GtFeedbk		179	XG-TeknoBa
	146	XG-GtrHrmo2		180	XG-Oscar
	147	Acoustic Bass		181	XG-SqrBass
	148	A.Bass and Cymbal		182	XG-RubberBa
	149	XG-Aco.Bass		183	XG-Hammer
	150	XG-JazzRthm		184	XG-SynBass2
	151	XG-VXUprght		185	XG-MelloSB1
	152	Finger Bass		186	XG-Seq Bass
	153	XG-FngrBass		187	XG-ClkSynBa
	154	XG-FingrDrk		188	XG-SynBa2Dk
	155	XG-FlangeBa		189	XG-SmthBa 2
	156	XG-Ba&DstEG		190	XG-ModulrBa
	157	XG-FngrSlap		191	XG-DX Bass
	158	XG-FngBass2		192	XG-X WireBa
	159	XG-ModAlem	Strings	193	XG-Violin
	160	XG-PickBass		194	XG-SlowVln
	161	XG-MutePkBa		195	XG-Viola
	162	Fretless Bass			

English

Group Name	Voice Number	Voice Name	Group Name	Voice Number	Voice Name
Strings	196	XG-Cello	Ensemble	230	Slow Choir
	197	XG-Contrabs		231	Scat
	198	XG-Trem.Str		232	XG-ChoirAah
	199	XG-SlowTrStr		233	XG-S.Choir
	200	XG-Susp Str		234	XG-Ch.Aahs2
	201	XG-Pizz.Str		235	XG-MelChoir
	202	XG-Harp		236	XG-ChoirStr
	203	XG-YangChin		237	XG-VoiceOoh
	204	XG-Timpani		238	XG-SynVoice
Ensemble	205	Strings 1		239	XG-SynVox2
	206	XG-Strings1		240	XG-Choral
	207	XG-S.Strngs		241	XG-AnaVoice
	208	XG-SlowStr		242	XG-Orch.Hit
	209	XG-ArcoStr		243	XG-OrchHit2
	210	XG-60sStrng		244	XG-Impact
	211	XG-Orchestr	Brass	245	AEM-Trumpet 1
	212	XG-Orchstr2		246	AEM-Trumpet 2
	213	XG-TremOrch		247	XG-Trumpet
	214	XG-VeloStr		248	XG-Trumpet2
	215	Strings 2		249	XG-BriteTrp
	216	XG-Strings2		250	XG-WarmTrp
	217	XG-S.SlwStr		251	AEM-Trombone
	218	XG-LegatoSt		252	XG-Trombone
	219	XG-Warm Str		253	XG-Trmbone2
	220	XG-Kingdom		254	XG-Tuba
	221	XG-70s Str		255	XG-Tuba 2
	222	XG-Str Ens3		256	XG-Mute.Trp
	223	Synth Strings		257	XG-Fr.Horn
	224	XG-Syn.Str1		258	XG-FrHrSolo
	225	XG-ResoStr		259	XG-FrHorn2
	226	XG-Syn Str4		260	XG-HornOrch
	227	XG-SS Str		261	XG-BrasSect
	228	XG-Syn.Str2		262	XG-Tp&TbSec
	229	Choir		263	XG-BrssSec2

Group Name	Voice Number	Voice Name
Brass	264	XG-HiBrass
	265	XG-MelloBrs
	266	XG-SynBras1
	267	XG-QuackBr
	268	XG-RezSynBr
	269	XG-PolyBrss
	270	XG-SynBras3
	271	XG-JumpBrss
	272	XG-AnaVelBr
	273	XG-AnaBrss1
	274	XG-SynBras2
	275	XG-Soft Brs
	276	XG-SynBras4
	277	XG-ChorBrss
	278	XG-VelBras2
	279	XG-AnaBras2
Reed	280	XG-SprnoSax
	281	AEM-Alto Sax 1
	282	AEM-Alto Sax 2
	283	XG-Alto Sax
	284	XG-Sax Sect
	285	XG-HyprAlto
	286	AEM-Tenor Sax
	287	XG-TenorSax
	288	XG-BrthTnSx
	289	XG-SoftTenr
	290	XG-TnrSax 2
	291	AEM-Baritone Sax
	292	XG-Bari.Sax
	293	XG-Oboe
	294	XG-Eng.Horn
	295	XG-Bassoon
	296	XG-Clarinet
Pipe	297	XG-Piccolo

Group Name	Voice Number	Voice Name
Pipe	298	XG-Flute
	299	XG-Recorder
	300	XG-PanFlute
	301	XG-Bottle
	302	XG-Shakhchi
	303	XG-Whistle
	304	XG-Ocarina
Synth Lead	305	XG-SquareLd
	306	XG-Square 2
	307	XG-LMSquare
	308	XG-Hollow
	309	XG-Shmoog
	310	XG-Mellow
	311	XG-SoloSine
	312	XG-SineLead
	313	XG-Saw.Lead
	314	XG-Saw 2
	315	XG-ThickSaw
	316	XG-DynaSaw
	317	XG-DigiSaw
	318	XG-Big Lead
	319	XG-HeavySyn
	320	XG-WaspySyn
	321	XG-PulseSaw
	322	XG-Dr. Lead
	323	XG-VeloLead
	324	XG-Seq Ana
	325	XG-CaliopLd
	326	XG-Pure Pad
	327	XG-Chiff Ld
	328	XG-Rubby
	329	XG-CharanLd
	330	XG-DistLead

Group Name	Voice Number	Voice Name	Group Name	Voice Number	Voice Name
Synth Lead	331	XG-WireLead	Synth Lead	365	XG-Pan Pad
	332	XG-Voice Ld		366	XG-Halo Pad
	333	XG-SynthAah		367	XG-SweepPad
	334	XG-VoxLead		368	XG-Shwimmer
	335	XG-Fifth Ld		369	XG-Converge
	336	XG-Big Five		370	XG-PolarPad
	337	XG-Bass &Ld		371	XG-Celstial
	338	XG-Big&Low	Synth Effects	372	XG-Rain
	339	XG-Fat&Prky		373	XG-ClaviPad
	340	XG-SoftWurl		374	XG-HrmoRain
	341	New Age Pad		375	XG-AfrcnWnd
	342	XG-NewAgePd		376	XG-Caribean
	343	XG-Fantasy2		377	XG-SoundTrk
	344	Warm Pad		378	XG-Prologue
	345	XG-Warm Pad		379	XG-Ancestrl
	346	XG-ThickPad		380	XG-Crystal
	347	XG-Soft Pad		381	XG-SynDrCmp
	348	XG-SinePad		382	XG-Popcorn
	349	XG-Horn Pad		383	XG-TinyBell
	350	XG-RotarStr		384	XG-RndGlock
	351	XG-PolySyPd		385	XG-GlockChi
	352	XG-PolyPd80		386	XG-ClearBel
	353	XG-ClickPad		387	XG-ChorBell
	354	XG-Ana Pad		388	XG-SynMalet
	355	XG-SquarPad		389	XG-SftCryst
	356	XG-ChoirPad		390	XG-LoudGlok
	357	XG-Heaven2		391	XG-XmasBell
	358	XG-Itopia		392	XG-VibeBell
	359	XG-CC Pad		393	XG-DigiBell
	360	XG-BowedPad		394	XG-AirBells
	361	XG-Glacier		395	XG-BellHarp
	362	XG-GlassPad		396	XG-Gamelmba
	363	XG-MetalPad		397	XG-Atmosphr
	364	XG-Tine Pad		398	XG-WarmAtms

English

Group Name	Voice Number	Voice Name
Synth Effects	399	XG-HollwRls
	400	XG-NylonEP
	401	XG-NylnHarp
	402	XG-Harp Vox
	403	XG-AtmosPad
	404	XG-Planet
	405	XG-Bright
	406	XG-FantaBel
	407	XG-Smokey
	408	XG-Goblins
	409	XG-GobSyn
	410	XG-50sSciFi
	411	XG-Ring Pad
	412	XG-Ritual
	413	XG-ToHeaven
	414	XG-Night
	415	XG-Glisten
	416	XG-BelChoir
	417	XG-Echoes
	418	XG-EchoPad2
	419	XG-Echo Pan
	420	XG-EchoBell
	421	XG-Big Pan
	422	XG-SynPiano
	423	XG-Creation
	424	XG-Stardust
	425	XG-Reso Pan
	426	XG-Sci-Fi
	427	XG-Starz
	428	XG-Sitar
	429	XG-DetSitar
	430	XG-Sitar 2
	431	XG-Tambra
	432	XG-Tamboura

Group Name	Voice Number	Voice Name
Synth Effects	433	XG-Banjo
	434	XG-MuteBnjo
	435	XG-Rabab
	436	XG-Gopichnt
	437	XG-Oud
	438	XG-Shamisen
	439	XG-Koto
	440	XG-T.Koto
	441	XG-Kanoon
	442	XG-Kalimba
	443	XG-Bagpipe
	444	XG-Fiddle
	445	XG-Shanai
	446	XG-Shanai2
	447	XG-Pungi
	448	XG-Hichriki
Percussive	449	XG-TnklBell
	450	XG-Bonang
	451	XG-Gender
	452	XG-Gamelan
	453	XG-S.Gamlan
	454	XG-Rama Cym
	455	XG-AsianBel
	456	XG-Agogo
	457	XG-SteelDrm
	458	XG-GlasPerc
	459	XG-ThaiBell
	460	XG-WoodBlok
	461	XG-Castanet
	462	XG-TaikoDrm
	463	XG-Gr.Cassa
	464	XG-MelodTom
	465	XG-Mel Tom2

Group Name	Voice Number	Voice Name	Group Name	Voice Number	Voice Name
Percussive	466	XG-Real Tom	SFX Voice	511	XG-WindChm
	467	XG-Rock Tom		512	XG-Telphon2
	468	XG-Syn.Drum		513	XG-CarEngin
	469	XG-Ana Tom		514	XG-Car Stop
	470	XG-ElecPerc		515	XG-Car Pass
	471	XG-RevCymbl		516	XG-CarCrash
	472	XG-FretNoiz		517	XG-Siren
	473	XG-BrthNoiz		518	XG-Train
	474	XG-Seashore		519	XG-Jetplane
	475	XG-Tweet		520	XG-Starship
	476	XG-Telephone		521	XG-Burst
	477	XG-Helicptr		522	XG-Coaster
	478	XG-Applause		523	XG-SbMarine
	479	XG-Gunshot		524	XG-Laughing
SFX Voice	491	XG-CuttngNz		525	XG-Scream
	492	XG-CttngNz2		526	XG-Punch
	493	XG-Str Slap		527	XG-Heart
	494	XG-Fl.KClik		528	XG-FootStep
	495	XG-Rain		529	XG-MchinGun
	496	XG-Thunder		530	XG-LaserGun
	497	XG-Wind		531	XG-Xplosion
	498	XG-Stream		532	XG-FireWork
	499	XG-Bubble			
	500	XG-Feed			
	501	XG-Dog			
	502	XG-Horse			
	503	XG-Bird			
	504	XG-Ghost			
	505	XG-Maou			
	506	XG-Tel.Dial			
	507	XG-DoorSqek			
	508	XG-Door Slam			
	509	XG-Scratch			
	510	XG-Scratch 2			

Drum Voice List

The following table lists the drum voice in the internal tone generators for MIDI file playback on the Disklavier or external MIDI device (synthesizer, sequencer, etc.). (→ pg. 78 "Enhancing the Disklavier Features by Hooking Up a MIDI Device")

Group Name	Voice Number	Drum Voice Name
Drum	480	XG-StandKit
	481	XG-Stnd2Kit
	482	XG-Room Kit
	483	XG-Rock Kit
	484	XG-ElectKit
	485	XG-AnalgKit
	486	XG-Jazz Kit
	487	XG-BrushKit
	488	XG-ClascKit
	489	XG-SFX Kit1
	490	XG-SFX Kit2

Vocal Harmony Type List

The following table lists the available vocal harmony types.
For details on the type selection, see "Applying an Effect to Your Voice (Vocal Harmony)" on page 57.

Vocal Harmony Type	Vocal Harmony Mode
Instrument Scat	Vocoder
Octave Up Scat	Vocoder
Auto Key Harmony	Vocoder
Auto Harmony-M	Vocoder
Auto Harmony-F	Vocoder
Octave Up	Chromatic
Octave Down	Chromatic
Country Quartet	Vocoder
Closed Men Quartet	Vocoder
Mix Acap Quartet	Vocoder
Womem Choir	Vocoder
Jazz Sisters	Vocoder
Standard Duet	Vocoder
Men Choir	Vocoder
Closed Choir	Vocoder
Girl in Duet	Vocoder
Speedy Mouse	Chromatic
High Male Quartet	Vocoder
Jazz Quartet	Vocoder
Mixed Choir	Vocoder
Country Girls	Vocoder
Sister Trio	Vocoder
Country Men	Vocoder
A Capella Boy	Vocoder
A Capella Mix	Vocoder
Gospel Diva	Vocoder
Lisa and Tina	Vocoder
Acap Mem Quartet	Vocoder
Jazz Mem Choir	Vocoder

Vocal Harmony Type	Vocal Harmony Mode		Vocal Harmony Type	Vocal Harmony Mode
Jazz Closed Cho	Vocoder		ChromaticXG	Chromatic
Jazz Women Cho	Vocoder		Voice & Inst	Vocoder
Ladies Quartet	Vocoder			
Sing B+G	Vocoder			
Barber shop	Vocoder			
Jazz Mixed Cho	Vocoder			
Dream Girls	Vocoder			
Sing the Bass	Chromatic			
Falsetto Duet	Vocoder			
Falsetto Trio	Vocoder			
Falsetto Dia	Vocoder			
Fal A Capella	Vocoder			
Falsetto Jazz	Vocoder			
2 Unison Low	Vocoder			
3 Unison Low	Vocoder			
Diatonic Jazz	Vocoder			
Diatonic Girl	Vocoder			
A Capella Dia	Vocoder			
Chordal XG	Vocoder			
Karaoke Auto	Vocoder			
Karaoke Mode	Vocoder			
Karaoke Girl	Vocoder			
Karaoke Pitch	Vocoder			
2 Unison High	Vocoder			
3 Unison High	Vocoder			
Vocoder Auto Upper	Vocoder			
Vocoder Auto Lower	Vocoder			
DetuneXG	Detune			
VocoderXG	Vocoder			
Vocoder Mode Upper	Vocoder			
Vocoder Mode Lower	Vocoder			
Vocoder Girl Upper	Vocoder			
Vocoder Girl Lower	Vocoder			
Vocoder PitchUpper	Vocoder			
Vocoder PitchLower	Vocoder			

Enhancing the Disklavier Features by Hooking Up a MIDI Device

MIDI (an acronym for Musical Instrument Digital Interface) allows electronic device (synthesizers, etc.) to interact and work in synchronization with other MIDI compatible device. Disklavier enables you to enjoy a variety of MIDI features by connecting a MIDI device or computer to the Disklavier's I/O Center.

Note: When you use the USB connection, it is required to install the USB driver to the connected device. In such a case, visit the following website and download the driver.

http://www.global.yamaha.com/download/usb_midi/

Hooking Up a MIDI Device

MIDI device (Drum Machine, sequencer, synthesizer, tone generator, etc.) or computer

To USB port

To MIDI output

To MIDI input

USB cable (not supplied)

MIDI cable* (not supplied)
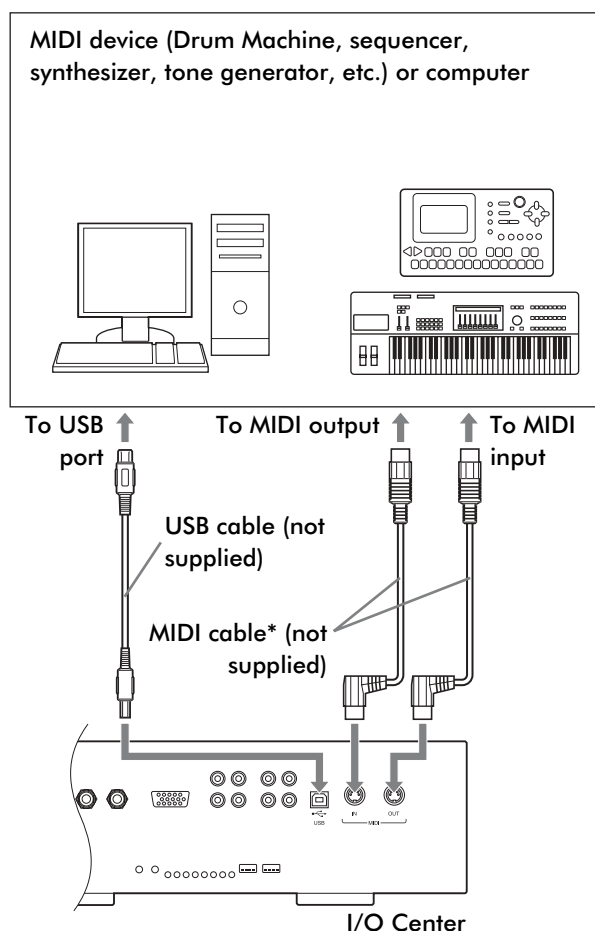
I/O Center

* Be sure to use the commercially available MIDI cable with the L-shaped connector on the I/O Center end.

Setting Up the Disklavier for MIDI Data Reception (MIDI IN)

The Disklavier can play back the MIDI data being received from the connected MIDI device as well as the software loaded or stored in the Disklavier itself. The following options should be set up in advance.

[Port]

Selects the terminal/port used for the data reception.

[MIDI]: Select this when the MIDI device is connected to MIDI IN terminal.

[USB]: Select this when the MIDI device is connected to USB port on the front of the I/O Center.

[Piano Rcv Ch]

The MIDI data consists of multi channels that are respectively assigned to a certain instrument's part. This option assigns the desired channel(s) to the piano part(s) that is (are) played back on the Disklavier's keyboard.

[##]: Select this when you assign no channel to the piano part.

[01] thru [16]:
Select the desired channel to which you assign the piano part.

[HP]: Select this when you assign the "01" and "02" channels to the piano parts, and the "03" channel to the pedal part.

[1+2]: Select this when the "01" and "02" channels are assigned to the piano parts.

[Prg]: Selects the smallest number channel assigned to the piano group voice (→ pg. 68) to be played on the Disklavier.

[Prg(All)]: Selects all channels assigned to the piano group voice (→ pg. 68) to be played on the Disklavier.

[Delay]

When the Disklavier receives two kinds of data (strong and weak note) at the same time, the weak note sounds a little bit later than the strong one due to the characteristics of the Disklavier's mechanism. To eliminate this delay in the sound reproduction and the notes are sounded in accurate timing at 500 millisecond after the data reception, usually a delay is applied to the incoming MIDI data.

[ON]: Select this when you apply this delay to the incoming MIDI data.

[OFF]: Select this when you do not apply this delay.

1 Tap on [Setup] in the [Main] screen, and then on [MIDI].

The MIDI screen consists of three screens. Tap on [Next→] or [←Prev] to switch the screen.

2 Tap on [Port]/[Piano Rcv Ch]/[Delay], and then press to select the desired option.

3 Tap on [Exit] to complete the setup.

Setting Up the Disklavier for MIDI Data Transmission (MIDI OUT)

The Disklavier can transmit the information of piano playing/ensemble part playback on the Disklavier as the MIDI data to the connected MIDI device to reproduce the sound with its sound generator, etc. or to record the MIDI data. The following options should be set up in advance.

[Port]

Selects the terminal/port used for the data transmission.

[MIDI]: Select this when the MIDI device is connected to MIDI OUT terminal.

[USB]: Select this when the MIDI device is connected to USB port on the front of the I/O Center.

[Transmit]

Selects one of the following parts to be transmitted to the connected MIDI device.

[ESBL Out]: Select this when you transmit the ensemble part played back on the Disklavier.

[KBD Out]: Select this when you transmit the piano part played on the Disklavier.

[P-Part ESBL Out]

Selects the channel(s) to which the piano part is assigned.

[ON]: Select this when you assign the piano parts to both the piano and the ensemble channels at data transmission.

[OFF]: Select this when you assign the piano parts to only the piano channels at data transmission.

1 Tap on ⬤ Setup in the [Main] screen, and then on MIDI.

2 Tap on Next ➡/⬅ Prev so that the following screen appears.

3 Tap on [Port]/[Transmit]/[P-Part ESBL Out], and then press 👆 👆 to select the desired option.

4 Tap on Exit to complete the setup.

English

Setting Up the Disklavier for Keyboard Playing Data Transmission (KBD OUT)

Besides the [MIDI OUT] options, more detailed setups for the keyboard playing data transmission is available. The following options should be set up in advance.

[Out Ch]

Assigns the piano part to the desired channels.

[##]: Select this when you assign no channel to the piano part.

[01] thru [16]:

Select the desired channel to which you assign the piano part.

[HP]: Select this when you transmit the ON/OFF pedal data to the "01" and the half-pedal data to the "03". (This option is prepared for the data format used on the former version of the Disklavier.)

[Local]

Selects whether you reproduce or not the piano part playing with the Disklavier's internal tone generator.

[ON]: Select this when you reproduce the piano part with the Disklavier's internal tone generator.

[OFF]: Select this when you reproduce the song (played on the Disklavier) on the external MIDI device. This option inactivates the internal tone generator to prevent both the internal and external tone generator sound at the same time.

[Split]

Sets the split point on the desired note that divides the keyboard into left-hand and right-hand part. The selected note and the notes lower than that note are assigned to the channel set in [Out Ch] option, and the notes higher than that note are assigned to the channel next to the channel set in [Out Ch] option.

[A-1] thru [C7]:

Select the desired note as the split point.

[OFF]: Select this when you assign all the notes to one channel.

[Trans L]

Transposes the left-hand part to the desired key at transmission.

[Trans R]

Transposes the right-hand part to the desired key at transmission.

1 Tap on [Setup] in the [Main] screen, and then on [MIDI].

2 Tap on [Next →]/[← Prev] so that the following screen appears.
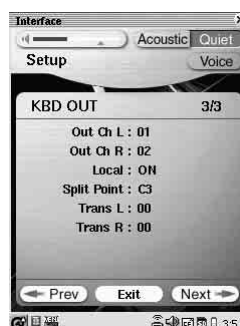
3 Tap on [Out Ch]/[Local]/[Split]/[Trans L]/[Trans R], and then press [ ] to select/adjust the selected option.

4 Tap on [Exit] to complete the operation.

Troubleshooting

If you are having difficulty operating your Disklavier, see if any of the symptoms listed below apply to your problem and follow the recommended remedy.

The Disklavier does not turned on.

- Make sure that the Power Supply unit is securely connected to an AC wall outlet with the supplied power cord. (→ pg. 14)
- Make sure that the Mains switches on both the Power Supply unit and the I/O Center are turned on.
- When the ⬛STANDBY/ON does not light green and stays flashing green several minutes after the I/O Center is turned on, turn the Power Supply unit off, wait approximately 10 seconds or more, and then turn the unit back on. (→ pg. 4 "Turning the Disklavier On" in "Quick Guide")

No sound is heard from the supplied Monitor speakers.

- Make sure the Monitor speakers' AC power cables are connected to the SWITCHED AC outlets on the Power Supply unit.
- Make sure that the POWER switches on both Monitor speakers are turned on.
- Make sure the Monitor speakers are connected to the OUTPUT jacks on the I/O Center with the supplied speaker cords. (→ pg. 13)
- Make sure that the overall volume is adequately turned up on the Pocket Controller. (→ pg. 12 "Adjusting the Overall Volume" in "Quick Guide")
- Make sure that the volume adjusted in [Balance] screen is adequately turned up on the Pocket Controller. (→ pg. 25 "Adjusting the Volume Balance among the Keyboard Playing, Ensemble Sound, Software Playback, and Microphone's Input")

- In Quiet mode, no sound is heard other than the solo piano sound during playback of a PianoSoft Solo song.
- The Monitor speakers are not supplied with the Disklavier PRO Series. In such a case, prepare active speakers equivalent to the Monitor speakers supplied with the Mark IV Series. (→ pg. 93 "Specifications")

The Disklavier cannot be controlled on the Pocket Controller.

- The Pocket Controller is beyond the maximum operating range (approx. 20 m (65.6 ft.)). In such a case, move closer to the Disklavier.
- Make sure that the CF wireless LAN card is securely inserted into the Pocket Controller's CF card slot. When you reinsert the card, be sure to reboot the Pocket Controller. (→ pg. 17)

The Disklavier does not read a song file.

- The maximum number of the readable files in an album (folder) is 999.
- Make sure that the name of the SMF song has an extension as ".MID"/".mid" and the E-SEQ song has ".FIL"/".fil".

The playback order differs from the order on another device.

- The playback order depends on the recording software or other factors. Naming the file starting from numbers such as 01, 02, etc. may solve the problem.

The Disklavier does not recognize an USB flash memory.

• The Disklavier restricts the usage of the USB flash memories to seven identical ones by recognizing the ID information of the memories that have been inserted to the USB ⬦⟵⟶ port. (→ pg. 2) If you use USB flash memories other than the ones already recognized, shut down the Disklavier once before using them.

• Certain USB storage devices may not function properly with the Disklavier PRO/Mark IV Series. For a list of compatible products, please visit www.yamaha.com/disklavier.

The Disklavier does not read a CD-R/-RW.

• The song files should be formatted in ISO 9660 LEVEL1. The Disklavier may not read song files other than this format.

Some notes drop out during playback.

• In Acoustic mode, when a piano song is played back at a low volume, some notes in trill or tranquil part may drop out. This is a characteristic of the Disklavier and not a malfunction.

PianoSmart playback cannot be performed.

• Makes sure that the numbers indicated on both the SmartPianoSoft floppy disk and the paired CD are the same.

The I/O Center becomes hot.

• Although the chassis of the I/O Center may become hot while the Disklavier is turned on (also in Standby mode), this is not a malfunction.

Noise is heard from the I/O Center.

• The I/O Center contains HDD (Hard Disk Drive) and the HDD makes a disk spinning noise. This is not a malfunction.

Error Messages

While operating your Disklavier, an error message may appear in the display. If an error message appears, refer to the table below for an explanation of the message.

Situation	Error Messages	Description
You tried to copy copy-protected song files into a removable medium.	CANNOT EXECUTE - PROTECTED FILE	The commercially available copy-protected song files cannot be copied into any removable media.
You tried to copy song files into an album that already contains 3,000 song files.	CANNOT EXECUTE - Exceeds limit of 3,000 songs	The maximum number of the files in an album (folder) is 3,000.
You tried to copy song files into a library that already contains 10,000 songs.	CANNOT EXECUTE - Exceeds limit of 10,000 songs	The maximum number of songs in a library or playlist is limited to 10,000.
You tried to copy song files into a certain medium.	NOT ENOUGH DISK SPACE	The storage space in the destination medium is not enough.
You tried to erase entire contents in a floppy disk. ([Delete All])	CANNOT EXECUTE - DISK FORMAT	The floppy disk is not formatted in MS-DOS. In such a case, reformat on a Windows PC.
	CANNOT EXECUTE - PROTECTED FILE EXIST	When the floppy disk contains copy-protected song files, this function cannot be executed.
You tried to copy an album to a floppy disk in E-SEQ (Piano1) format.	CANNOT EXECUTE - NOT 2DD DISK	The destination floppy disk must be 2DD.
	CANNOT EXECUTE - Exceeds limit of 60 songs	The maximum number of songs on an E-SEQ type disk is limited to 60.

Screen Transition Diagrams

[Main] screens

(→ pg. 9 in "Quick Guide", and 37, 41)
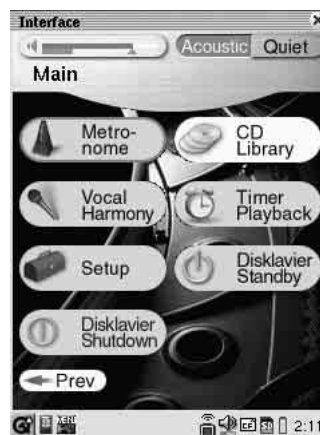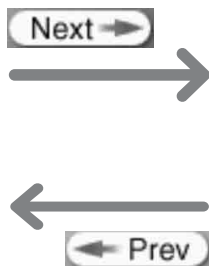
(→ pg. 6, 7, 9 in "Quick Guide", and 37, 55, 57, 59, 62 – 66, 79 – 81)

[Rec] screens

[Song] screens

(→ pg. 15 in "Quick Guide")

(→ pg. 24)

(→ pg. 23)

(→ pg. 31)

PianoSmart manual adjustment
screen*
(only for PianoSmart playback)

(→ pg. 34)

(→ pg. 32)
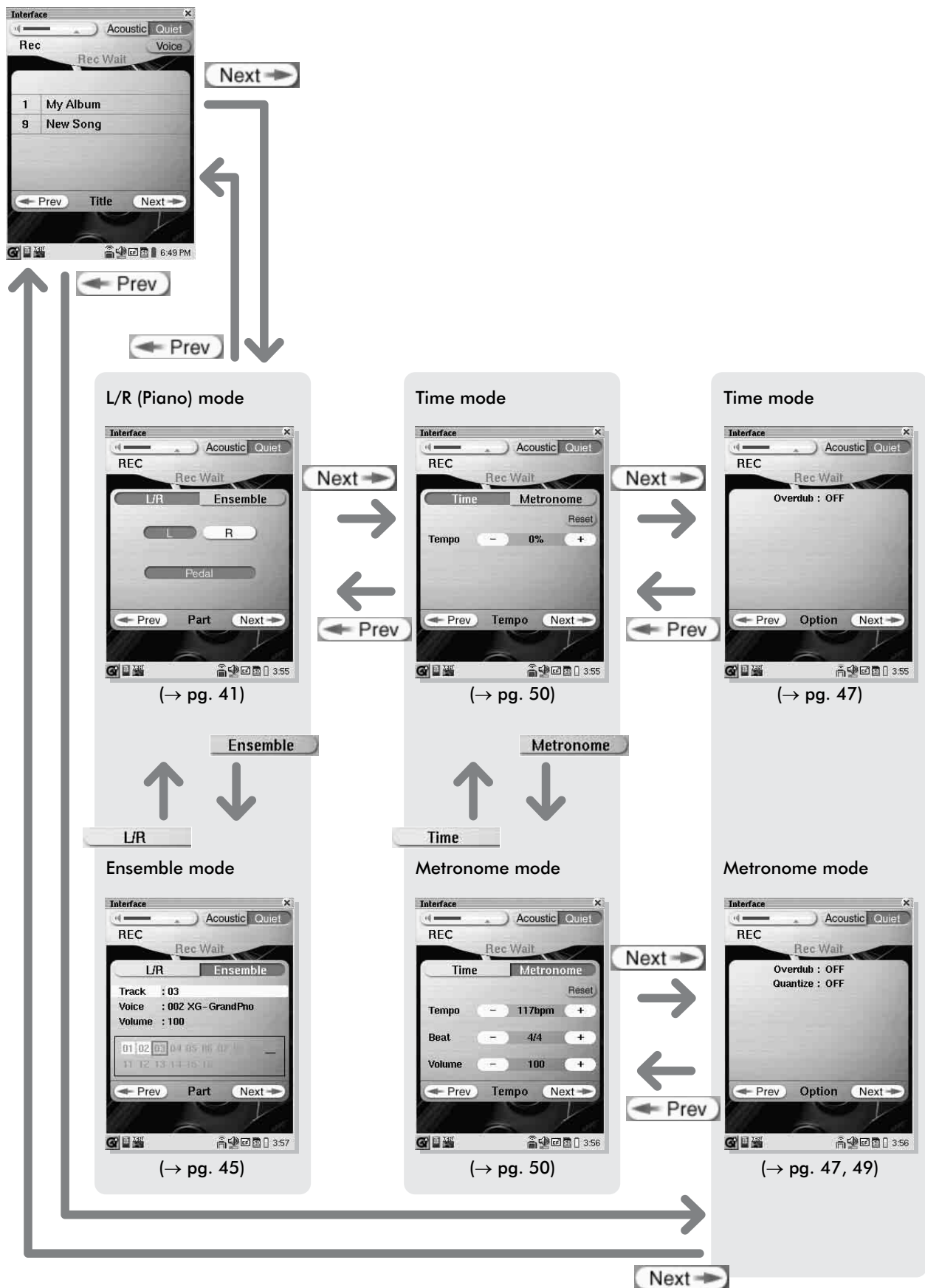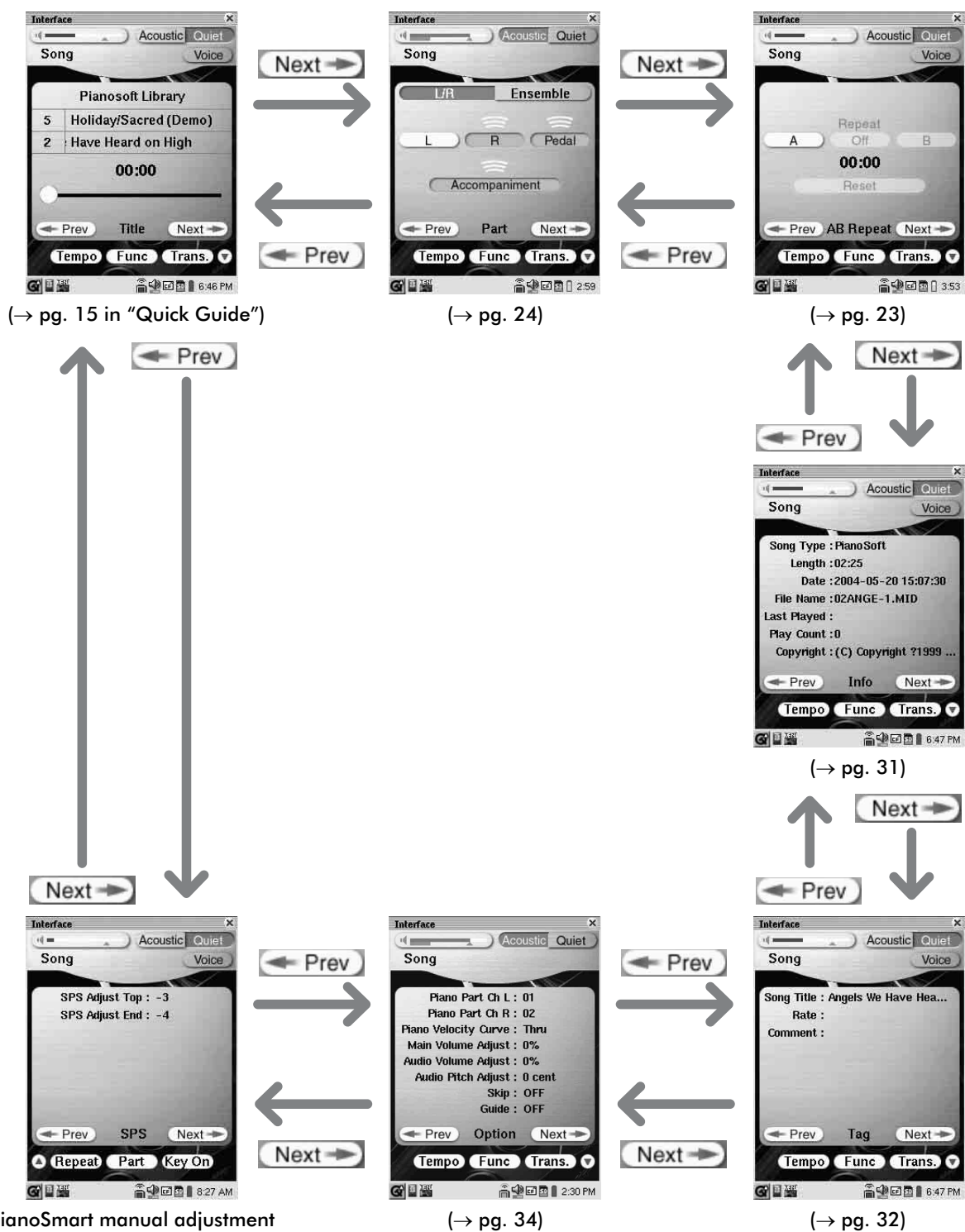
* For normal use, modification of these
   setups are not required.

[Song] playback option buttons

(→ pg. 22)   (→ pg. 23, 55)   (→ pg. 44, 57)
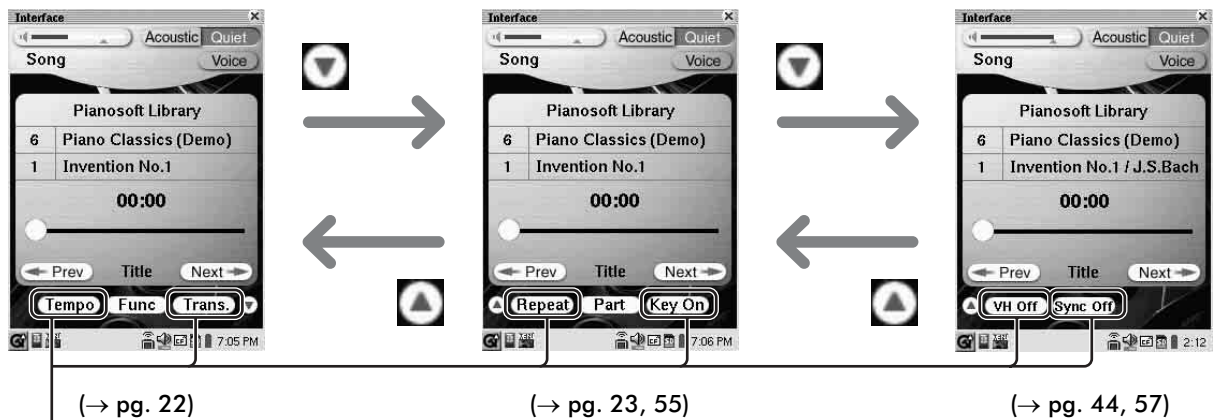
Playback option buttons

[Setup] menu screens

(→ pg. 39, 40, 43, 57,   (→ pg. 55, 63, 65, 66)
59, 62, 66, 79 – 81)

English

[Setup] option screens

(→ pg. 61)

(→ pg. 43)

(→ pg. 79)

(→ pg. 64)

(→ pg. 65, 66)

(→ pg. 63)

(→ pg. 55)

English

Interface ✕
Acoustic | Quiet
Setup | Voice

MIDI OUT 2/3

Port : MIDI
Transmit : KBD Out
P-Part ESBL Out : ON

◄ Prev | Exit | Next ►

6:52 PM

(→ pg. 80)

Interface ✕
Acoustic | Quiet
Setup | Voice

KBD OUT 3/3

Out Ch L : 01
Out Ch R : 02
Local : ON
Split : A-1
Trans L : 00
Trans R : 00

◄ Prev | Exit | Next ►

6:52 PM

(→ pg. 81)

Interface ✕
Acoustic | Quiet
Setup | Voice

Foot Control 1/1

[FootCntrl 1]
Function : OFF

[FootCntrl 2]
Function : OFF

◄ Prev | Exit | Next ►

3:58

(→ pg. 59)

Interface ✕
Acoustic | Quiet
Setup | Voice

Reverb 1/1

Type : Hall1
Depth(Voice) : 64
Depth(Mic) : 0

◄ Prev | Exit | Next ►

6:52 PM

(→ pg. 40)

Interface ✕
Acoustic | Quiet
Setup | Voice

One Touch 1/1

Function : No Function

◄ Prev | Exit | Next ►

6:52 PM

(→ pg. 66)

Interface ✕
Acoustic | Quiet
Setup | Voice

MasterTune 1/1

Reset

– | 0cent | +

◄ Prev | Exit | Next ►

6:52 PM

(→ pg. 57)

Interface ✕
Acoustic | Quiet
Setup | Voice

Harmony 1/1

Split Point : C2
Volume : 80%

◄ Prev | Exit | Next ►

6:52 PM

(→ pg. 39)

Next ► | ◄ Prev

CHAPTER

11

Glossary

This glossary provides basic definitions of terms used frequently in Disklavier manuals.

Clavinova™
A series of Yamaha digital pianos.

Continuous Pedal
See "Incremental Pedal".

Ensemble Song
A song which contains piano parts and accompanying instrumental voices. An Ensemble song contains the same left and right-hand parts as an L/R song, and in addition, up to 13 accompanying instrument tracks. These extra tracks are played by the internal XG tone generator. The accompanying tracks may be used for acoustic bass, drums, strings, vibes, etc.

E-SEQ Song Format
A song file format developed by Yamaha for saving songs.

Floppy Disk
The magnetic storage medium that the Disklavier uses to save songs. The Disklavier uses the 3.5 inch 2DD and 2HD floppy disks commonly used for computers.

General MIDI (GM)
An addition to the MIDI standard that simplifies the transfer of MIDI song files between instruments of different manufacturers. A MIDI song recorded using a GM compatible tone generator should play back correctly when used with any GM compatible tone generator. The standard specifies that a GM compatible tone generator must support 24-note polyphony, 16 parts, and 128 standard voices.

Half Pedal
See "Incremental Pedal".

Incremental Pedal
Piano pedals are not always completely up or down and may be held somewhere in-between. Using incremental pedal data (also called continuous or half pedal data) the Disklavier precisely records the up and down movement of the piano pedals.

L/R Song
In a L/R song, the left-hand piano part is stored on track 1 (L) and the right-hand piano part is stored on track 2 (R). During playback you can cancel either part, and then play that part yourself. When recording an L/R song, you can record the two parts simultaneously or separately.

MIDI
An acronym for Musical Instrument Digital Interface. MIDI allows electronic musical instruments to communicate with each other.

Piano Parts
Refers to the left- and right-hand piano parts of a song. The left-hand piano part is recorded onto track 1 and the right-hand piano part is recorded onto track 2. These track assignments are the default settings and can be changed.

PianoSoft™
The PianoSoft Disk Collection is a library of prerecorded song disks made by Yamaha specifically for use with the Disklavier.

PianoSoft·Plus™
PianoSoft·Plus disks contain Ensemble songs that can be played on the Disklavier.

Polyphony
The maximum number of voices (or sounds) that can be produced at a time from MIDI instruments.

Quiet Mode

A Silent system mode in which sound is output through the speakers, enabling you to freely adjust the volume of the piano.

Reverb

Short for "reverberation." The effect that adds a more realistic feel to a sound by simulating the reflection of the sound in rooms and halls of various sizes.

Rhythm Track

Tracks of an ensemble song designated for the accompanying rhythm. The rhythm track is unaffected by the playback transposition function.

Sequencer

A sequencer can be used with the Disklavier to play back and record MIDI data.

Smart PianoSoft™

Software made by Yamaha containing MIDI signals for playing back along with standard audio CDs.

SMF

Abbreviation for Standard MIDI File.

SMF Song Format

A song file format supported by MIDI sequencers and music software.

Song

Normally, a short piece of music with lyrics. However, for clarity in Disklavier manuals, the term is used to refer to any piece of music of any genre.

Sound Muting Mode

Yamaha's innovative system in which a tap of Quiet keeps the hammers from striking the strings, effectively silencing the acoustic piano. Sound is sent to the digital piano tone generator and output through the speakers (Quiet mode) or headphones (Headphone mode).

Standard MIDI File (SMF)

A file of MIDI data that can be read and used by a number of different MIDI devices and computers.

TG Master Tune

The function that allows you to tune the internal XG tone generator, and if connected, an external tone generator simultaneously so that their tunings match that of the Disklavier.

Tone Generator

An electronic device that can generate tones or instrument voices.

Transpose

Changing the key of a song. For example, a song in the key of C is transposed to the key of D when it is moved up two semitones.

Velocity

Because the loudness of a piano note is determined by the speed (velocity) with which a string is struck by a hammer, note loudness is referred to as velocity.

Voice

The sounds produced by a tone generator expressing various instruments.

XG

Yamaha XG is an extension of the GM (General MIDI) format. Its greater polyphony, more voices, and use of effects enhances the compatibility between MIDI devices. When a song in the Yamaha XG format is played on another XG-compatible tone generator or synthesizer, it plays and sounds as the original composer/creator intended.

Specifications

General

Sensor System	Key Sensors	Noncontact optical fiber/grayscale shutter sensing system for 88 keys (senses the key position, keying velocity, and key releasing velocity)
	Hammer Sensors* * Equipped with the C3 grand piano or higher specification models only.	Noncontact optical fiber/grayscale shutter sensing system
	Pedal Sensors	Noncontact digital optical sensing system (senses the pedal position*) * Continuous sensing for the damper and soft pedals, and on/off sensing for the sostenuto pedal.
Drive System	Keys	DSP servo drive system (high-power servocontrolled solenoids with supersensitive magnetic sensor*) * The supersensitive magnetic sensor is only for the PRO Series.
	Pedals	DSP servo drive system (servocontrolled solenoids)
Data Storage	Internal HDD	80 GB
	File Format	Standard MIDI File (SMF) FORMAT 0/1, E-SEQ
Removable Media	Compact Disc	Yamaha PianoSoft·PlusAudio, audio CD (ISO 9600-compliant), Data CD (ISO 9660 Level1-compliant)
	Floppy Disk	3.5" 2DD (720 KB) or 2HD (1.44 MB) floppy disk
	USB Flash Memory	Yamaha does not assure the operation of all the commercially available USB flash memories. For a list of compatible products, please visit www.yamaha.com/disklavier.
	USB Hard Disk Drive	FAT32 format
Media Center	Drive	CD and floppy disk drive
	Dimensions (W × H × D)	405 × 257 × 73 mm (16 × 10 1/8 × 2 7/8 in.)
	Weight	3.3 kg (7.3 lb.)
Pocket Controller	Dimensions (W × H × D)	74 × 138 × 23 mm (2 15/16 × 5 7/16 × 15/16 in.)
	Weight	210 g (7.4 oz.) (not incl. screen protector, wireless LAN card, incl. rechargeable battery)
Monitor Speakers* * Supplied only with the Mark IV Series.	Rated Power Output	20W × 2 with tone and volume controls
	Drivers	16 cm (6 5/16 in.) woofer × 2, 2.5 cm (1 in.) tweeter × 2
	Dimensions (W × H × D)	144 × 236 × 167 mm (5 11/16 × 9 5/16 × 6 5/8 in.)
	Weight	4.4 kg (9.7 lb.)
Record/Playback Mode		Standard mode (Mark IV Series), XP mode (PRO Series)
Pitch Control		Set at A=440 Hz, tunable ±50 cents in 1 cent increment
Silencing Mechanism		Motor-driven hammer shank stopper
Piano Voice and Performance Tone	Type	AWM2/Articulation Element Modeling (AEM)
	Polyphony	64 notes digital stereo sampling (90 MB wave memory, 16 bit linear) (AWM2)/ 6 notes Articulation Element Modeling (AEM)
	Normal Voices	Piano (digital stereo sampling) and other 42 voices

Ensemble Tone	Type	Advanced Wave Memory 2 (AWM2)
	Polyphony	32 notes (max.)
	Ensemble Parts	16 parts
	Voice Module Modes	XG, GM
	Normal Voices	676
	Drum Voices	21 kits
Power Source		Local AC current, 100 – 240 V, 50/60 Hz
Power Consumption		180 W
Supplied Accessories		Media Center (1), Installation kit for the Media Center (1 set), Monitor speaker (2)*, Installation kit for the Monitor speaker (1 set)*, Speaker cord (2)*, Pocket Controller PRC-100 (1), CF wireless LAN card (2), Rechargeable battery EA-BL08 (1), Cradle (1), AC adaptor EA-70 (1), AC power cord (1), Advanced Operating Manual (this book), (1), Quick Guide (1), Stereo headphones (1 set) * Supplied only with the Mark IV Series.
Optional Accessories		HPE-170 headphones

Features

Playback Features	Media Select	Floppy disk, CD, USB media, internal HDD
	Arrangement of Songs	Song Libraries (PianoSoft Library, User Library, CD Library) → pg. 9 in "Quick Guide"
	Polyphony	32 keys (PRO Series), 16 keys (Mark IV Series)
	Volume	128 levels
	Repeat	ALL (all songs in current album), RPT (current song), RND (all songs in current album in random order), A-B repeat
	Programming	Play Lists feature
	Part cancel	L (left), R (right), Pedal, Accompaniment
	Tempo	-50 to +20% in 1% increment
	Transposition	±24 semitones (2 octaves) in 1 semitone increment
	Balance	Volume balances among Voice (digital piano sound), TG (ensemble sound), Audio (accompaniment or standard audio sound on a CD), and MIC (microphone input)
	Track Voice changing	→ pg. 26
	Track Editing	Mix, Move, Copy, Delete, Transpose → pg. 28
	SmartKey	→ pg. 35
	SmartPiano	→ pg. 36
	Video Synchronization	→ pg. 36
Piano Playing Features	Metronome	→ pg. 37
	AEM Articulation	Head (blow-up), Joint, Tail (fall-down)
	Harmony	→ pg. 39
	Reverb	Hall1, 2, Room1, 2, 3, Stage1, 2, Plate (with 0 to 128 depth control)

English

Recording Features	Overwrite Recording	→ pg. 42
	Video Synchronization	→ pg. 43
	Ensemble Part Recording	→ pg. 45
	Overdubbing	→ pg. 47
	Metronome Mode Recording	→ pg. 48
	Quantize	→ pg. 49
	Tempo Changing	→ pg. 50
Other Features	Timer Play	→ pg. 55
	Vocal Harmony	→ pg. 57
	Foot control/switch	→ pg. 59
	XP Strip	→ pg. 63
	Backup	→ pg. 64
	One Touch Button	→ pg. 66

Specifications are subject to change without prior notice.

disklavier™

PRO / Mark IV Series

Appendix

Appendix

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